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EDUCATION FOR HUMAN DEVELOPMENT

by

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Abstract

This thesis examines the problem of entering into someone else's "world" for the purpose of promoting human development through education. By "world" is meant that particular structuring of reality that constitutes a people's total and unique relationship with the universe.

Four questions immediately arise in the path of such an undertaking: "What is human?" "What is development?" "How may human development be promoted?" and "What must education become if it is to be human development promoting education?"

It is suggested that in order for a people to develop, three categories of knowledge must be simultaneously expanded. These are as follows: 1) historical-hermeneutical knowledge, which is able to interpret the immanence of the past in the process of shaping the present and the future; 2) phenomenological knowledge, which amounts to the articulation of the "world" as it is currently structured, so that what makes it possible to live life as it is actually lived today is shown; and 3) religious knowledge, which constitutes an articulation of the ideational set which is at once a description of an ideal present and a vision of human possibility into which the process of human development may unfold. A participatory research approach is indicated to answer these questions.

By entering the problem of the thesis through the door of a concrete situation (a Dogrib community in the Northwest Territories) a critique is offered of what has been done in the name of "development" among the so-called developing peoples of the world. An analysis of educational efforts fielded in the name of "development" (many of which are shown to be decidedly anti-developmental) is provided.

It is only through a deep understanding of what it is to be a human being that the question of human development can be approached. Human beings can have great influence as to which of the myriad development possibilities will be actualized. But which image of the future, and of human possibility shall we choose? Since the possible may not be the wise, where may human beings look for wisdom to guide their own development process? This question is explored in some depth and practical suggestions are offered.

What then is the nature of development promoting education? The relationship between the process of human development and an education that is rooted in that process is explored in the light of a theory of praxis. It becomes clear that a reconceptualization of what we mean by the terms "education", "educator", "pedagogy", and "curriculum" to conform with our best understanding of human development is essential.

As this task is undertaken, a clear description of what education that promotes human development must be unfolds. Finally, a careful examination of what curriculum is and is not in the process of human development is offered.

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My advisor, Dr. Ted Aoki, is one of those rare educators who actually practices what he believes about education. Foremost, Dr. Aoki believes in the potential of human beings to develop their own capacities, if only given the opportunity to engage authentic questions. For never allowing me to lose sight of my questions, and for legitimatizing and protecting my field-based approach to this study despite its departure from traditional research approaches, Dr. Aoki is owed my deep thanks.

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Introduction

The very idea that human beings develop, that they were not always as they are now, and that they will one day be quite profoundly different than we know them today is a relatively new conceptualization in the history of ideas.

Until little more than one hundred years ago, human life seened to flow on through countless generations, cycle upon cycle; always the theme was the same. The variations were of little consequence. They could not alter the deep structure of the world. For the "way of things" had been established by the Creator in "the beginning". Or so it seemed.

There were occasional lapses into other realities: Gautama Buddha, Moses, Muhhamad, Black Elk, and perhaps thousands of forgotten seers, teachers, shamans and priests. These were the scientists of human possibility who opened a window into the darkened recesses of our collective structuring of reality. In retrospect, a developmental process of infinite duration can be witnessed. Yet the finest minds successive ages produced labored within a paradigm of existence that was blinded to this process.

What Gautama Buddha and Millaropa after him illustrated for the moral and spiritual development of the individual, and what Charles Darwin and Gregor Mendel realized from meditative reflection on biological processes only really gelled into systematic social thought in the nineteenth century with the philosophy of Georg Wilhelm Fridrich Hegel and the sociology of Karl Marx.

It is as ironical as it is dialectical that the very idea of "human development" should take root in the historical soil of processes through which the generality of mankind is being sucked into the vortex of a universal leveler of culture: the ossifying, massifying global phenomenon Alvin Toffler has called "indust-reality" (Toffler 1980:114-131).

It is ironical because, as I will illustrate in the chapters to follow, authentic human development is ultimately participatory in nature, while the massification of experience and the blocking of meaningful participation in human change processes are hallmarks of our industrial culture. Participation in the human development context refers to the active involvement of the volition of the developing subjects (be they individuals or a collective) in their own evolutionary development. The standpoint from which this task is approached is inescapably that of the developing subject's "world".

That world is what I mean when I say "culture". It is that particular structuring of all dimensions of reality that hang together to compose, for example, the Snare Lake Dogrib way of being in the world.[1] That collectively shared experiencing of the world is unique both in its present form and in the historical processes through which it has evolved. That "world" is the ground in which the roots of human development must thrive. "Indust-reality" implies a process of uprooting human consciousness from this phenomenological ground and thereby casting the developing subject into a sort of dehistorized evolutionary limbo--a new gleaming chrome and porcelain standpoint from which it is virtually impossible to develop as a human being.

Human development is a process that unfolds from the center of being itself. Yet it occurs in relationship to other beings and to a context. Alfred North Whitehead speaks of the ontological "immanence" of this process--that it "comes out" of the very nature of what it is to be a "being". He discusses the struggle throughout the history of ideas to balance the Semitic notion of law (a description of the fundamental process of the universe) imposed by the "fiat of one God" against the idea that the law emerges out of a universal process of becoming. He shows how Plato balances these two ideas by saying that "being" is at once an agent in this action of becoming a recipient of the actions, and the ever-evolving product of an eternal process (Whitehead 1967:120). It is necessary to reflect deeply upon the process of human becoming in order to understand how it is that some of our most time-honored practices in the field of education are fundamentally destructive to the process of human becoming.

Because human development is a process, it necessarily unfolds through the medium of events in time and space. To understand my history is to understand the course of those world-shaping events as I have been associated with them which cumulatively have given rise to my current constitution of "the world". And yet these events have not merely happened to me. I have been the acting subject that has at the same time made these events what they are; and I do not say "what they were", because in terms of their reality to me, they exist now as shapers of my meaning-making activity.

Now, to be denied access to these events, to have them erased from my consciousness or distorted so that my relationship with them could not take its normal developmental course (as has happened to nearly every indigenous people on the planet), would be to suffer a paralyzing loss. For my conscious interaction with the world as I have constituted it (phenomenological knowledge) as well as some grasp of how that constitution has itself been structured (historical-hermeneutical knowledge) are essential if I am to develop, that is, if I am to actualize both the potentialities I now know that I possess, and those that are invisible to me. The knowledge of human possibility as well as of how to actualize that potential I shall term "religious knowledge"; and I will, in the course of this thesis, endeavor to describe the essential role religious knowledge plays in human development.

The conscious awareness of what human beings will become or might become is a category of knowledge that does not gain admission under the legitimizing shadow of the cartesian world view which now dominates western scholarship. Such knowledge is consigned the epitaph of "fluff" or more politely, "vision", "mysticism", "imagination"--but certainly not "knowledge".

And yet countless civilizations have risen and flourished on a foundation of such "fluff". Indeed, as Sorokin has helped us to understand, it is characteristic of a miniscule portion of the downward cycle of a dying culture that anything projecting the aura of "vision", "spirituality", "intuition", or "mystical" is to be discounted as reliable knowledge.

Sorokin argued that the root of conflict in human society in this century can be traced to a divergence of perspective between those who see reality as being materialistic or what can be termed "sensate" (what you sense is what there is and there is no more) and those who see the material aspects of reality interconnected with a spiritual dimension of existence.

> We have seen the modern sensate culture emerge with a major belief that true reality and true value were mainly or exclusively sensory. Anything that was supersensory was either doubtful as a reality or fictitious as a value. It

> either did not exist or, being unperceivable by the senses, amounted to non-existence. Respectively, the organs of senses, with the secondary help of human reason were made the main arbiter of the true and false, and of the real and unreal, and of the value and valueless. Any charismatic-supersensory and superrational revelation, any mystic experience, any truth of faith, began to be denied, as a valid experience, a valid truth, and a genuine value. The major premise of the sensory nature of the true reality and value is the root from which developed the tree of our sensate culture with its splendid as well as its poisonous fruits. Its first positive fruit is an unprecedented development of the natural sciences and technological inventions. The first poisonous fruit is a false narrowing of the realm of true reality and true value. (Sorokin 1957 :311)

As well as a knowledge of the structure of "the world", and a grasp of the historical processes that have loaded each aspect of that world with meaning, developing human beings require an ever-expanding horizon of vision, of possibility, toward which they may consciously direct themselves.

If people are cut off from their own visionary capacity by the numbing, hypnotizing "white noise" of indust-reality; if they are convinced that whatever sense they might have of "the possible" or the "could be" is probably only a throwback from some childhood fantasy; if in fact they are led by the nature of a myopically materialistic civilization to turn off the operation of their spiritual and visionary capacities much as some psychotic individuals "turn off" the use of their legs or their hand or their eyes until manoeuvered out of this self-imposed affliction by a skillful therapist, such a people cannot develop as human beings.

This is so primarily because the key to human development is the will. Unless human beings can visualize themselves in a different condition than the one they now live in, and unless they can decide (on some level) to pour their life's energy into that newly visualized form, whatever reshaping that takes place will not be of an immanent nature, and as such will not constitute the unfolding of potential--which in essence is what development is.

When a people have been robbed (by historical processes such as colonization) of access to their past, a re-creation of that past becomes a vital part of the learning that must be promoted by development educators. How this may be done and what roles it might serve in the development process are important questions underlying this study.

Indust-reality appropriates the past of every "pre-industrial" people who are drawn into its web. That past is distorted and re-interpreted in terms that serve the long-range interests of outsiders. In a material sense, then, contemporary industrial culture imposes the "laws of existence" much as the naive (or politically motivated) branches of Western theology proposed that God had imposed the world "as it is". The result is the same. The individual comes to believe that he cannot change the world, that it is the way it is. He is thus a prisoner of time. This appropriation of history is essentially a latent strategy to control. The scientific (i.e. empirical-analytic) approach used to interpret, for example, the history of the Dene as one group of native people in Canada, may be carried on by academics with the highest of motives. And yet the net effect of anthropologies and histories of Indians on the Indian people has been that the living cultural history--the one that is actually rooted in the lived world of the people, the one that shapes the world and contributes to its memory--that history has been displaced by its sterilized, de-spiritualized, alienated academic counterpart.

In my work with Rwandans and with Indian people in Canada, I found people hungry for knowledge of their cultural history, but reluctant to rely on any but the most "scientifically" legitimated versions of that history. Always the individuals I worked with would come away impressed by the analytical sweep of an academic history of their people, but never-the-less hollow and unfulfilled.

The significance of this is, as Habermas pointed out, that there is now a separation between being (that is, the collective reality of who we are and how we came to be who we are) and ethics (the knowledge of what is good, a knowledge necessary to orient action for the future) (Habermas 1968:303-4).

Orwell in 1984 understood this issue of how the past, the present, and the future are linked in human beings. The Party slogan, "Who controls the past controls the future; who controls the present controls the past" neatly encapsulates the issue.

We know that the process through which a people are uprooted from their world is at once cruel, clumsy and deceptively subtle. Much has been written about the political economy of colonialization. But of the psycho-social level of that process, and more particularly of how a people might be helped to re-claim their world and get on with the business of their own development, not a great deal has been written. We have the works of Alfred Memmi (1967), Franz Fanon (1960, 1963), Amilcar Cabral (1969), Mao Tse Tung, Paulo Freire (1970, 1974, 1978), Denis Goulet (1977, 1980 1983), and perhaps most significantly of A.T.A. Ariyarante (1978, 1979, 1980, 1981), as well as his American collaborator, Joanna Macy (1983), to name some of the most important contributors. However, only the latter three of these have fully grasped the significance of cultural standpoint, or what I will term the spiritual foundations of development.

Until Ariyarante the bulk of the literature has treated the traditional (and certainly the religious) past as something of a handicap to be overcome. I will argue that until human beings acknowledge and consciously cultivate their own spirituality in their own cultural terms, and until they come to understand the role that spirituality has played in their history, they will not be able to progress.

This is because it is essentially a spiritual activity to reflect on one's own meaning-making and valuing activity in terms of a vision of what is possible. As well, it is a spiritual capacity to be able to believe in non-material, and even non-actualized realities. If a people cannot consider their own structuring of reality in relationship to a hitherto unrealized potential for transforming that reality (a vision), then they will remain prisoners of history--a history of which they are the objects, but never the subjects.

What then does it mean to be an "educator" in the context of developing society? There are two parallel streams of inquiry that flow from this primary question. The first entails a search for how best to assist a developing people to reconstitute their educational activities (formal and nonformal) so that education is promoting (and not undermining as it does in so many instances today) an authentic human development process.

In order to address this series of questions, we must inquire into the nature of the human development process itself. But no sooner have we begun our inquiry, than we are faced with another order of questioning. For, in order to ask into the nature of the human development process, we must first know a great deal about the nature of human beings. Not only must we know from paleontologists, archeologists, anthropologists and historians what human beings have been, and not only must we know from geneticists, biologists, psychologists, sociologists, anthropologists and philosophers what human beings seem to be today, but also we must know what human beings might become. We must have some idea of human potentiality; and even that knowledge must be linked to an understanding of how best to catalyze and to sustain the process of actualizing human potential.

There is another dimension to my questioning. My "reality", i.e. my way of interpreting and acting upon the world, is rooted in my own language and culture, my personal history (autobiography), my academic training, and in the personal choices I have elected to make, themselves intimately connected to my personal beliefs about the nature and purpose of human existence.

In my work with other developing subjects (and herein lies the crux of the question because both I and the people I work with are developing beings) what must I do, indeed, what must I become, in order to be of genuine educational assistance? As subsequent chapters will show, the packaging and promoting of my own style of being in the world, of my own vision of human possibility could well seriously subvert the development process of those I am ostensibly working to assist.

And yet, I too am struggling to decolonize my spirituality, my thinking processes, my deepest feelings and my actions in the world. To be colonized is to be parasitically linked to interests other than one's own. How very easy it is to unwittingly colonize those we wish to "educate".

Mutuality is the ontological ground of all development-enhancing relationships. Of what does authentic mutuality consist? It is important to have a sense of this because education is a process that is grounded in human interactions. We can speak of the pedagogical "relationship". What then does it mean for me to commit myself to a mutual struggle for human development? What is my part? It is relatively easy for a western-trained social scientist to delineate the socio-cultural processes that go on in developing societies (though this work is usually done in hindsight). It is not so facile a task for a comparatively richer, more healthy, more powerful "educator" to establish any kind of non-predatory relationship with a group of individuals who perceive themselves to be powerless, victimized, and dependent on that "educator" for "answers" that will resolve the dilemma of their underdevelopment. This difficulty is further compounded by the fact that the culture system out of which I have come (indust-reality) is itself the colonizer, the perpetrator of the very systems that have in large measure given rise to the "dilemma of underdevelopment" in the first place.

Because I am a product of that culture and more specifically of the academic institutions that have grown up to preserve and foster that particular formulation of "the world", it seems to me that the only way that I can be of educational assistance to "developing peoples" is to struggle to create, in collaboration with my co-partners in the development process, a new context for authentic human development. What is implied by such a struggle is that the world I have struggled to succeed in, the world I have learned to be comfortable and secure in, the world within which I can predict likely oucomes (and manipulate them, if need be, for my own purposes), that world will change as a result of this process.

As we have learned from Talcot Parsons, large systems have built in self-preservation mechanisms that are fairly intolerant of efforts to reconstitute the system in some other way. The educational establishment (universities and teacher training colleges, textbook companies, secondary and primary schools, and ministries of education) may well be, as a set, the most ponderous of all systems in our society, the slowest to respond at their core to pressure, the most resistant to changes that might mean different sorts of outcomes than those for which the system was originally established. This may be because the educational system is itself reflective of the dominant functional values that underlie the society at large.

Its task is to prepare successive generations of children to fit into a world of someone else's making. It is important to bear this in mind as we speak about a search for a kind of education that re-creates a "world"; that sees as one of its principal objectives the transformation of that very "world" which the current educational system has been posited to preserve and reproduce.

It is possible to assert with some bravado that as educators we are independent professionals who hold the real power because it is we who interface directly with learners. The reality, however, is that the law and the means to do things on a scale that will matter rest on the side of the status quo. Funding flows through very selected channels. Teachers keep pouring out of relatively unchanging training programs, textbooks that will sell keep being produced, and administrators continue to emulate their training and their predecessors.

Even more difficult to deal with than all of these is the fact that the parents of the current school populations all over the world expect and want their children to receive the kind of education that they themselves received, or that enabled an elite few from their society to gain power and privilege.

The search for the means of changing the educational system is at base a search for the means to change the foundation structures of society. This thesis is being written from a curious academic standpoint in that regard. Many academic researchers have sought after effective ways to wrought change upon society. Yet, might the fact that we clamor for change not itself be reflective of a massive human change process that has been well underway for some time? This process is, as I understand it, planetary in scope, world-transforming in its implications, and I believe, ultimately irresistible. My thesis flows from the assumption that "we are the final generation of an old civilization and the first generation of a new one" (Toffler 1980:28).

> A funny thing happened on the way to the Revolution. There we were, beating our breasts for social change, when it slowly began to dawn on us that our big deal social political struggle was only one parochial engagement of a revolution in consciousness so large that it has been hard to bring it into focus within our reality. (Irving Thomas, cited in Ferguson 1980:58)

I believe that the tumult we are experiencing around us; the threat of nuclear holocaust, the erosion of public trust, the crumbling of major economic institutions, the conflagration of ethnic tensions, the proliferation of alcohol and drug abuse, mental disorders and other social pathologies--all of this clamor is, in essence, the birth pangs of a new world order.

The distinguishing characteristic of this "new world" is that it emerges as human beings step into the driver's seat of their own individual and collective evolution. This entering into life, fully conscious of our capacity to re-create ourselves and the world, is itself an emerging context for a radically new kind of revolution: a revolution of the human spirit.

This context is a social fact in our time, though many are not yet conscious of it. Prophets and mystics spoke of it (Baha'u'llah, Mehr Baba, Pierre Teilhard de Chardin) and a growing network of contemporary scholars have sought to describe it (Sorokin 1957, Toffler 1980, Ferguson 1980, Capra 1983). It was not only through "the literature" that I came to believe that we live at a critical turning point in human evolution, but also through the 1960s, through political activity during the Viet Nam war, through the struggle of building an intentional community in the Kootenay region of southcentral British Columbia, through the direct experience of personal transformation, and through the application of principles learned in my own struggle to be of some assistance to developing societies both in Canada and central Africa.

In the native communities with which I am now so deeply involved there is a virtual coming to life after long years of a deep sleep, of internalized oppression, and of a loss of spirit. It is as though a spiritual springtime has arrived. It is the season of awakening in these communities.

Human development, as I shall describe it, through examples in the pages that follow, is both a response to, and a consequence of, the immanent process of Being unfolding its potentiality. It is not only that development specialists may have hit upon the right theory or the right method. It is also, I will argue, a process whose time has come. What we do not know is how best to respond to the potential that quivers within us and waits to animate our communities. Confident in the reality of the vision I have hinted at above, though quite unable to "prove" it, I set out, as a researcher and an educator to determine how pre-industrial people might be assisted to discover within themselves and their communities the power and the vision to re-create the world.

The only way to learn how to undertake such an educational enterprise was to begin, to work in some concrete setting with real people and real problems. Accordingly I spent ten months working with the Dene Nation, a native political organization representing twenty-six native communities in Canada's Northwest Territories. My role was as a staff consultant in education and community development matters. I then moved to southern Alberta, where at this writing, I am working on a national native development project (the Four Worlds Development Project) that is seeking to generate a process of community transformation leading to, among other things, the elimination of alcohol and drug abuse. Our entry point into involvement with communities is often the school, but we are soon involved in a community learning process that touches families, elders, women, men, youth, spiritual leaders and all important groups, agencies and boards in the community.

This involvement, coupled with a previous two years spent in Rwanda, central Africa working with some 160 rural communities forms the experiential base from which the observations and examples presented in this thesis will flow.

Part One: The World

We have inherited from Galileo, Descartes, Bacon and Newton, but especially Descartes, the idea that the universe can be reduced to measurable, controllable pieces, re-arranged in some analyzable sequence and thus, bit by bit, brought within the power of human understanding. In his Discourse on the Method of Rightly Conducting One's Reason and Searching the Truth in the Sciences, Descartes says, "there are no paths to the certain knowledge of truth open to man except evident intuition and necessary deduction" (cited in Capra 1983:59).

Intuition and deduction, but not only these. Also doubt. Descartes cloistered himself away and proceeded to doubt everything he could think of to doubt: all his knowledge about the world, his sense impressions, the fact that he had a body; until all that remained was the one who doubted--the thinker. "Cogito, ergo sum." "I think, therefore I exist."

From this process of reduction Descartes concluded that the "conception of pure and attentive mind" was quite distinct from the world. He says, "There is nothing in that of mind that belongs to that of body" (Ibid). This division between "res cogitans" (the thinking thing) and "res extensa" (the extended thing, the thing we think about) made it possible for man to stand outside of nature and comprehend it completely. It was upon this foundation doctrine that the edifice of western scientific thought was constructed.

From this tradition sprang the notion of "objective" knowledge of the world, which in turn gave rise to the belief that various human technologies such as education could be culturally "neutral" endeavors.

It was not until the famous debate between Albert Einstein and Niels Bohr which took place in the 1920s that the empirical foundations of "objective" knowledge began to liquify and shift in frightening and unpredictable directions. The crux of the debate was over the issue of paired subatomic particles that behaved, over great distances, as though they had some telepathic connection to each other. If one turned right, the other turned left. If one turned up, the other turned down. What was shattering, indeed unacceptable to minds steeped in the Cartesian world view, was that the particles seemed to be influenced by the thoughts of the researchers. Mind and matter were tentatively reunited.

I dwell on this issue because it is one that is barely acceptable scientifically (indeed by only a small minority of thinkers despite the apparently irrefutable evidence that has been stockpiled in its favor) because of its unthinkable ideological consequences. If we call to mind the anguish Copernicus and Galileo suffered at the hands of ecclesiastical authorities for their reconstitution of the world, we are likely to believe that such intellectual repression is out of the question in our enlightened age.

I offer that the notions of relativity and the ultimate subjectivity of human knowledge are equally as difficult to accept and as threatening to the ideological ground of "indust-reality" in the twentieth century as the helio-centric universe was to the churchmen of the middle ages. As Jürgen Habermas has shown, "objective" knowledge enterprises are rooted in a particularly blatant ideological interest: control (Habermas 1971:301-17).

The idea that the education generated by industrial cultures can be brought to pre-industrial societies as a "neutral tool" which will aid them to "advance" along a linear scale of social evolution has been used to justify the wholesale exportation of the processes and the context of our formal schooling systems to indigenous societies all over the world.[1] The native people of Canada are not excepted in this generalization.

When I began to work as an education consultant for the Dene people, I was already superficially aware of the massive failure of our education system as a promoter of human development in the twenty-six Dene communities scattered up and down the Mackenzie drainage system.[2] While the government of the Northwest Territories Department of Education could not provide exact retention statistics due to the unavailability of records before

1974, it was clear that between ninety-four and ninety-six out of every one hundred Dene children that entered the school system in grade one did not graduate from high school in all the years since 1953.

Before that time, it is safe to assume that fewer children even entered the system, since there were no schools established in most of the communities.[3]

In 1983, nearly two generations of Dene children had been exposed to the formal school system. According to modernization theory[4] there should have by now been a core of educated Dene leaders and entrepreneurs ready to lead their communities into the "mainstream" of Canadian society. While there are individual exceptions, this core group of educated elite have not materialized. When we consider other native groups in southern Canada with as long as two hundred years of "opportunity" to be assimilated into the dominant society, and their "failure" to derive the promised benefits from the education system offered by industrial culture, it is clear that a reconsideration of the role of education in the process of human development in native communities in Canada is in order.

With the Dene, as with every cultural group that I have worked with, there was a body of preliminary research (historical and anthropological) that had to be undertaken. There are two important reasons why this is so.

First, human development is the unfolding of human potential, both individual and collective. This means that a people will develop or progress out of a previous condition and into a condition of actualized potentiality. It cannot be assumed that Dene (or any) people dwell in the same "world" as do non-native educators who have grown up perceiving "reality" as "indust-reality". In order to begin a process of education (of leading the people out, to refer to the Latin roots of the word "education") of one condition into another, it was essential that I find a way to enter into that "world".

This assumption is based on the understanding, reiterated by Alfred Schutz (1971), Maurice Merleau-Ponty (1973) and others that in distinct languages and cultures are unique articulations of "the world", i.e. of reality. This unique way of framing all perceptions, of interpreting all experiences, and of relating to all environments is what I mean by the term "culture".

A peculiar trait of any native cultural standpoint is that individuals who dwell within it believe that their reality is objectively "real", and that any other configuration of the world represents a distortion of the "truth". Our own culture (indust-reality) boasts an impressive slate of philosophers, scientists and thinkers (some of whom have been mentioned above) who lend rational support to this view. It is important for educators to realize that virtually all cultures have a rich rational and artistic heritage that justifies their constitution of "the world".

It is therefore ludicrous and naive to think that I could assist the Dene, or other native people, to develop their potential as human beings until I can in some measure penetrate and dwell in that "world" that is exclusively theirs. This is because the gradual unfolding of their human potential will necessarily be a process that is rooted in that world and no other. As well, if there are obstacles to human development (and there always are), the means to overcoming those obstacles will be found in the knowledge base, the virtues and the values of that "world".

The second reason that educators wishing to promote a human development process must first conduct some form of cultural-historical research is related to the nature of the development process as seen from the standpoint of developing subjects themselves. From that standpoint, the development of human collectives amounts to the reconstitution of "the world" in the image of a new vision of human possibility.

In order for a people to be able to reconstitute their world, they must first be conscious of and able to articulate their present configuration of reality. What we know is not known in a way that allows us to readily articulate it (Polanyi 1966), and yet this non-articulated knowledge powerfully shapes our meaning-making activity.

Developing people need to know what shapes their shaping of the future. If they do not understand their own immanence to the extent that they can see the relationship between past historical processes they have lived through and the current articulation of the world in which they are now active participants, they will not be able to take effective control of the reconstitution of that world. There will always be latent and usually invisible forces within the culture governing the shaping of the future. These forces may well conflict with newly discovered values priorities, but because of their tacit nature, there will be no way for developing people to accept or reject their influence.

Michael Polanyi taught us that much of what we know is not known in a way that allows us to readily articulate it (Polanyi 1966). And yet this non-articulated knowledge has great shaping power on our meaning-making activity.

What we articulate is surely the socially visible portion of a much more profound and far-reaching meaning system.

> I regard the significance of a thing more important than its tangi- bility, I shall say that minds and problems are more real than cobblestones. This is to class our knowledge of reality with the kind of fore knowledge which guides scientists to discover. (Polanyi 1966:33)

In the case of developing human beings, the tacit knowledge of immanence operating just beneath everyday awareness is not "objective" knowledge, in that it can be known apart from the ones who know it. As Maurice Merleau-Ponty showed, what we really appeal to in questing for this knowledge is people's experience of objectively observed behavior.

The method by which this may be done has been termed "phenomenological" in that it seeks a qualitative description of the basis of human experiences, i.e. that which makes experience possible. The experience we are talking about is that of living life together in certain ways. The knowledge of that experience is not objective (in the Cartesian sense), but neither is it merely subjective in the aesthetic sense of that word. It is rather inter-subjective. It is knowledge shared by all and known by individual subjects only as an aspect of "the world".

We are talking about two dimensions of consciousness operating at the same time, one within the other. Individuals within a culture know of their own immanence only in so far as they find certain consequences of the immanence reflected back to them through the behavior of others with whom they interact. Maurice Merleau-Ponty was, in the passage that follows, speaking of the problem of self-awareness in the context of intersubjectively held knowledge. For purposes of this discussion, consider the problem of collective self-awareness of a particular cultural entity such as a community, a tribe or a nation.

> This consciousness of self cannot be given a privileged position. It is impossible without consciousness of others. It is of the same variety. Like all experience, the experience of self exists only as a figure against a ground. (Perception of others is like the ground from which perception of self separates itself.) We see ourselves through the intermediary of others. (Merleau-Ponty 1973:46)

This suggests that indigenous culture, unaware that there is any other "reality" than itself, must gaze into a mirror held by other hands until it discovers that there is indeed a frame around the "world", and that there is more beyond that frame. Herein lies the crucial first-level task of an educator in the human development process. For culture is not like a coat that one wears. It is rather like the eyes with which one sees. The one thing that eyes do not see is themselves.

The suggestion that cultural outsiders are not only useful, but essential, to the cultural development process goes against the current of mainstream social thinkers. It is generally argued that the very opposite is true; i.e. that native people or blacks or women need to get together with themselves to the exclusion of outsiders in order to determine who they are and who they are not.

Yet, is this process of "differentiation"[5] not itself evidence that a group of people are transcending a naive cultural standpoint? Is not the essence of differentiation the recognition that we are a, not b; we are x, not z? One model of human learning presents three distinct stages of the process: differentiation, integration, and generalization.[6]

Differentiation is distinguishing between what is known and what is to be learned.

Integration is integrating what is learned with some specific aspect of what is known that interfaces with what is to be learned.

Generalization is the further integration of what is learned with all aspects of the known "world".

The first step (differentiation), in the case of distinct cultural communities, can occur in a number of ways, but the outcome is always the same. An awareness dawns that a) our "world" is not the only possible configuration of reality, and b) we have carried our "world" forward through successive generations. At one time it did indeed conform to "reality". Of all the possible configurations, it was the most conducive to our survival for a particular period of our history in a particular environmental set. But now reality (i.e. our total environmental set, consisting of the bio-physical, socio-cultural, ecological, psycho-spiritual and unknown environments) has changed. The tension between our "world" and that reality is what we now feel as motivation to continue our development as human beings.

The process leading to the emergence of this realization generally follows a course such as this:

1. Inter-cultural contact is made. This comes as a result of some larger historical process which may include any and all of the following features: a natural catastrophe, empire expansion, war, the establishment of trade patterns, political and economic domination in the form of slavery or colonialism, and cultural or educational exchanges.
2. A relationship of a more permanent nature is established between two or more cultures that is at once symbiotic (i.e. each system feeds on the other for some aspect of its survial), and as well based on some form of domination of one culture over the other.
3. The dominant culture retains its dominance at the expense of the economic and social standing of the dominated culture. This leads eventually to a kind of survival crisis within the dominated culture. Examples of this "survival crisis" may be seen in the black and Spanish-speaking communities in large U.S. cities, on Indian reserves in Canada and the U.S., and in the barrios and ghettos of scores of third world

capitals. It is marked by extreme social pathologies such as a breakdown of the extended family system, intra-family violence, severe alcohol and drug abuse, a petty and sometimes violent crime wave, and often, suicide. All of these pathologies were almost totally absent from the traditional culture. It is also typical of a cultural community experiencing a "survival crisis", that the people can no longer win a living from the environment.[7] The consequence of this one aspect of crisis is utter economic dependency or death.

4. Partially because of a total frustration with the breakdown of "the world", and also because of a new perspective on that world gleaned from contact with the core values and perspectives of another (dominant) culture (through employment, formal schooling, the media, day-to-day contact with government and market systems), a small group of individuals within the dominated culture begin to look for ways of reviving their own people. It is with this group of people that development educators must initially ally themselves.[8]

In order to be able to hold a mirror up before developing people (and thereby to assist a bringing to conscious knowledge of their distinct configuration of the world, and of the historical process that has led to a breakdown of that world), it is necessary to acquire three categories of knowledge. Much of this knowledge is held tacitly by the developing people themselves, just below ordinary daily awareness. Indeed it is that which makes ordinary awareness possible in the first place. These three categories of knowledge may be termed 1) historical-hermeneutical knowledge, 2) phenomenological knowledge, and 3) religious knowledge.

1. Historical-hermeneutical knowledge amounts to an understanding of who a people were and how they came to be who they are today. It provides a sense of cultural-historical motion. The immanence of a world that has melted into the texture of language and lived culture must be fleshed out and shown up in the pattern of everyday life. What stands behind us, pushing us as we decide on our futures? What has happened to us that has shaped our shaping of "the world"?
2. Phenomenological knowledge is the articulation of a cultural insider's experience of what it is to live a life (or certain strategic aspects of it). It is the patterned use of human energy that constitutes the realm of values. Phenomenological research is the articulation of "the world" as it is experienced. It is the making visible and

conscious of that which has been transparent and hence invisible simply because it is so ordinary. It is not, however, mere reporting of everyday life per se, but an uncovering of that which makes it possible to live life in the particular way that it is lived everyday from a particular (cultural) standpoint.

3. Religious knowledge constitutes the ideational set which stands as a vision of how to live a life in that "world". It is the articulation to the horizon of understanding of what a human being is and what life, in an ideal sense, can be. It is the expression of a shared vision of human possibility.

In the pages that follow I will work with several examples to show how historical-hermeneutical and phenomenological knowledge can be unearthed for educational/developmental purposes. I will do this by speaking in a deeply personal way about the painful struggle I have undergone as I have tried to work productively with various developing peoples. A portion of my own struggle has been to recognize in its many forms my own relentless tendency to attempt to manipulate, dominate and control the development of other human beings and to superimpose my world onto another reality system. This tendency is born out of patterns of insecurity and selfishness that can be traced back three generations in my own family. To the extent that I have been able to transcend these and other more generalized cultural patterns, I have been successful in my efforts to enter into "the world" of my co-partners in the human development process.

Roughing in the World: Visions in the Concrete

Edmund Carpenter (Carpenter 1973) tells how inner city children who had never ridden a horse were taken to stables, presented with saddled steeds, and told they could ride. These children leapt into their saddles and with the finesse of the Lone Ranger, rode off in a cloud of dust and a hardy, "Hi ho Silver away!". Joseph Chilton Pearce argues that the children were able to do this because they had watched it being done on TV so many times that they were able to enter into the action which already existed as a category in their minds (Pearce 1977).

When viewed from the perspective of developing subjects, human development may be understood as a process of stepping into a new category of being.[9] The term "category of being" and the term "the world" are not synonymous. "Category of being" denotes an aspect of "the world". Yet to enter into someone else's world entails a similar process.

Pearce describes three stages involved in entering into a category:

1. Roughing in the category: This involves gaining knowledge of the capacity, and the intention (volition) to express it. The category is usually assimilated into the overall reality system.
2. Filling in the details: During this period the colors, shadows and highlights are filled in until, in a global way (i.e. involving as many faculties at once as is possible), the category is entered into.
3. Practice and variation of the category takes place during which the new capacity is repeated many times in a variety of styles to fine tune it to the overall reality system into which it has been absorbed.

As Carpenter (1977) has shown it is not always necessary that people fully live out a new category in the physical world in order to be able to enter into it.

All that seems to be necessary is that the overall shape of the world is roughed in with enough detail to allow a person to approximate dwelling in the category (a type of performance in a way[10]) with others who are accustomed to that mode of being without causing insiders to experience it as outsiders. This dwelling together in a world is possible if the stranger has succeeded in learning the overall shape as well as some detail of the gestalt that is "the world" of any particular people and then is able to step into that new category.

One of my previous educational intervention experiences was with the Banyarwanda people in Rwanda, central Africa. I now realize that my first involvements with them were largely ahistorical. Had I in any way sensed the thrust of their cultural history (and my own), I might have guessed that hundreds of years of feudal competition between families had generated distorted communication patterns and social instincts that relentlessly militated against a unified community action of any sort.

But I was a stranger:

> As a matter of course the stranger starts to interpret his new social environment in terms of his thinking as usual. (Schutz 1971, Vol II:97)

My interpretation of situations such as the one described above became less stilted and more effective as I was able to become involved with the lives of people over a prolonged period. The impression that to them I was "a man without a history" (Ibid) changed in a very concrete sense. I had stepped into their history.

> The former onlooker becomes a member of the caste, enters as a partner into social relations with his co-actors, and participates henceforth in the action in progress. Ibid:98

What Schutz does not seem to realize, though, is that in two senses one is never really a full-fledged "member of the caste".

In the first place one has not been "fully fledged", that is, one has not grown into that world; so that one is in a sense articulated by that world in the unique style peculiar to, in my example, the Banyarwanda culture. I had never been, nor could I ever be, a Maturaggwe, one of the brothers, one whose father's father had drawn life from that land through the soles of his calloused feet and given it again to his sons and daughters. Hence I would remain a perpetual stranger to those mutual knowing glances that framed the silent world of the understood-but-never-spoken.

My face was white. My smell was different. My speech was from some place far away. Always I had to be included and explained to.

I was like the water jug on the head of a village woman. She greets her friends. She gossips and scolds her children. She laughs and haggles with the vendors at the market. She stoops to buy a kilo of rice here, a spoon of palm oil there--but she never completely forgets the water jug. Always she must make that just-beneath ordinary conscious effort to remain perfectly erect and in balance so that the jar does not tumble to the ground.

And sometimes they would forget me; forget that I was a stranger (should I be complimented?). Each "remember the times when..." set me free as a helium balloon is freed from the hand of a totally pre-occupied child. I was busily occupied with the hermeneutic problem of interpreting their world. But they were pre-occupied. They had shared four thousand years of life together and what I now witnessed flowed out of that history.

There is also another sense to it. My very presence bore witness to the fact that the taken-for-granted world of the Banyarwanda was not, after all, inevitable and immutable. Herein lies a distinct pedagogical advantage if one's intent in being "a stranger in a strange land" is to foster human growth.

Constantly my Rwandan friends would draw attention to my uniqueness. Indeed, they would not allow me to forget that I was different; that I found options and advantages where they found obstacles, or nothing. Perhaps for them I embodied the possibility that life could be lived differently than the way they had learned to live it.

That experience dwells in me as I turned again to the Dene people of the Northwest Territories.[11] In order to assist the people of Lac La Martre (a tiny Dogrib village located some 150 air miles northeast of Yellowknife) in their educational development efforts,[12] I felt it necessary to go there for the sole purpose of allowing the category of their "world" to enter into me.

Research: the Heart of the Matter

I begin (ontologically) from a distance, both in terms of the interpretative frame I carry into the questioning process, and in terms of the type of knowledge I can at first make any sense of. The intimate knowing glances of "insiders" are mere outcropings of the bedrock of "the world".

How very naive I am as I stand on a frigid windswept airstrip surrounded by a half dozen Dene youth, their faces burned blue/black by the icy fire of the wind. I am later to learn that these temporary scars are the Dogrib equivalent of having killer eagles tatooed on your chest in certain districts of Los Angeles. They mean "I am a man. I am unafraid of pain. I am strong. Don't mess with me." More deeply, though, they mean, "I take care of my own. I will check the nets far out on the lake even in the face of deadly wind. It is -50C. I will check the traps. I will hunt for cariboo as my forefathers have always hunted to provide food for my family. I am, after all, a man."

Yet to me, standing on the snow-packed runway in a -35C wind, these meanings were as invisible as the reality system out of which they come. To me, as I watched the crowd gather to about fifty people, some arriving by snowmobile, some on foot, I was seeing a phenomenon not unlike what Samuel Clements reported when the paddle wheelers came into quiet Missouri towns in 1870 America.

What I did, from the very first minute I set foot in Lac La Martre, was to interpret my experience of that place and those people in terms of my own history, my cultural filters, and my evaluative system.

> To the stranger the cultural pattern of his own home group continues to be the outcome of an unbroken historical development and an element of his personal biography, which for this very reason has been and still is the unquestioned scheme of reference for his 'relatively natural conception of the world'. As a matter of course the stranger starts to interpret his new social environment in terms of his thinking as usual. (Schutz 1971, Vol II:97)

And why not? What other system could I possibly use?

The answer to that question is critical. I could have used a "systems model" of sociological analysis (Parsons 1951) or a conflict model (deriving from the philosophy of Hegel or the sociology of Marx) or I could have superimposed Helm's (1969) ethnographic attempt to reconstruct the lifeways of this people that I found in my university archives. But I did none of these. Indeed, the primary task for a researcher in the first stages of this process is to rid oneself of all foreknowledge about this people or any people like them.

By this I mean that any attempts to make "objective" (and therefore scientifically manageable) the intersubjective reality of that "world" can only serve, at this stage, as an obstacle to knowledge. This is because what one then experiences is a mingling of 1) someone else's reconstituted abstraction of certain aspects of "the world" with 2) one's own direct interaction with that world.

In many ways, researchers in the western academic tradition, have taken Plato's instruction to Glaucon too much to heart.

> But we have brought you into the world ["we" meaning the philosopher/teachers who have led their students out of ignorance] to be rulers of the hive, kings of yourselves and of other citizens and have educated you far better and more perfectly than they have been educated, and you are better able to share in the double duty. Wherefore each of you, when his turn comes, must go down to the general underground abode, [meaning the cave in the allegory wherein the generality of humankind stare at shadows on a wall and thereby interpret the world] and get the habit of seeing in the dark. When you have acquired the habit, you will see ten thousand times better than the inhabitants of the den, and you will know what the several images [i.e. shadows on the wall] are, and what they represent, because you have seen the beautiful and just and good in their truth. (Plato. The Republic, Book VII, B. Jowett translation, p. 261)

Do we not inherit a tradition of human research that conceives itself to be descending into the darkness of ordinary human awareness with the light of "true scholarship"? Do we not believe that once we learn to "see in the dark", that is, to interpret the peculiar nuances of life in any particular research setting, that we will be able to "see ten thousand times better than the inhabitants of the den"?

Embedded in Plato's use of metaphor is an ideology of class and privilege that separates those who rule from those who are ruled by giving an elite few ownership or control of a certain category of knowledge--theoria, the contemplation of universal truths, the right to name the world.

I have come to realize that although every people constitute reality in distinct ways, still there are universal truths that may be found at the core of all cultures. It has been my experience that no one, however erudite, can truthfully claim to have a monopoly on this universal knowledge. Indeed, the converse seems to be true, that the more abstracted from the concrete life world one's knowledge of a particular human context, the more unable one is to recognize the universality of this particularized expression of human being. For example, seen through the lens of dialectic models of the human condition, Lac La Martre people can easily be reduced to struggling victims of a relentless colonization process that has abstracted them from their traditional means of production, which has in turn caused a degeneration of the social relations of the community to pathological severity. This pattern can be seen because it is to some extent present. Yet it is "seen" by filtering out many other patterns equally as "real" and far more contributive to the total gestalt of life in Lac La Martre.

To Touch and be Touched

The first stage in getting to know a people must take place on the level of the heart. What I mean by this is that in order to begin to understand and appreciate what it is to live life in that "world", I must grow to accept and even to love them. I must experience them as human beings, as real people (not Dene or Indians or some other category of non-person). I must experience them loving their children, caring about their spouses, struggling to make a living, and trying to cope with a changing world that seems to be slipping more and more from their control. Beyond what I see as an outsider, I must make enough personal contact with members of the community to be able to feel that they have recognized me as a human being as well; that somehow I have touched some of them as they have touched me.

The reason this stage is so important, and must precede any academic examination of the cultural history of these people and their world is because this identification on my part of shared universals gives the analytically trained scholar within me permission to access a vast range of reference points within my own life experience from which I can begin to understand my co-partners in the development process. I am no longer trying to relate to them from outer (academic) space. I know deep inside of me that Mary-Alice, Stephen, Francis and Pierre and all the rest of them depend on the same earth for substance as I do; that we breathe the same air; that we cry when we are sad; that we can be hurt; that we can be joyful and celebrate--in short, I know these people as human beings a lot like me and I am therefore innoculated against abstracting them from life and reducing their lifeways to itemized products of social forces in a cultural feature list. Beginning from the question, "How are our worlds similar?" before trying to detail the differences, insures that there will be some mutual ground to stand on during the entire process.

The Dance of Life

Edward T. Hall describes another dimension of culture that is so subtle it has taken the development of stop action film and frame-by-frame analysis to discover: rhythm. Hall calls it the "dance of life".

> It can now be said with assurance that individuals are dominated in their behavior by complex hierarchies of interlocking rhythms. Furthermore, the same interlocking rhythms are comparable to fundamental themes in a symphonic score, a keystone in the interpersonal processes between mates, co-workers, and organizations of all types... (Hall

1983:140)

Hall describes how human beings are locked together in a dance which functions almost totally outside awareness.

What is most significant to the issue of intercultural relations, each culture dances a measurably different rhythm. The work of John Collier (1967, 1973) in this field is highly significant. Collier descovered that native children speak, gesture, bob their heads, and evidently process information to the beat of one cultural drum and that their white teachers proceeded to operate the classroom to quite another rhythm--their own.

The kind of subtle sense of unease, of being out-of-sync, that immersion in someone else's rhythm endows may be compared to trying to listen and perform a dance to two very powerful but very different pieces of music being played simultaneously by two orchestras.

The painstaking work of William Condon (1975, 1977, 1979) linked the six different brain wave frequencies to specific bands of internal rhythm. These internal rhythms in turn are synchronized with speech patterns and body movements, including eye movement, head bobbing, hand gestures and general body posturing.

Both Condon and Hall suggest that the subtle multi-level synchrony that occurs between new born infants and mothers is learned in utero. Hall believes this synchrony begins "with the myelination of the auditory nerve about six months after conception (Hall 1983:161).

Hall goes on to suggest that the normal biorhythms seem to act in synchrony with the more general rhythms present in whatever cultural group we are immersed in. While this conjecture awaits experimental confirmation, Hall has produced incontrovertible evidence on film showing that distinct cultural groups are synchronized to distinct rhythms, and that these are expressed in speech patterns, gestures and general use of body space.

In any interactions across cultural lines, such as in my interactions with Dogrib people,

> The power of the rhythmic message...is one of the basic components in the process of identification, a hidden force that, like gravity, holds groups together. (Hall 1983:168)

Hall's work shows that western industrial culture, with our linear-sequential, verbal, analytical orientation proceeds with a steady, non-syncopated, almost driving, on-the-beat pulse. Native people, by contrast, express a two-part syncopation, which in some groups is even visible in hand movements. Hall records that native American hand movements often begin with one hand and then, at midpoint, shift to the other hand.

Condon, writing about American blacks, makes the following observation:

> Black behavior (some) is beautifully syncopated at the micro-level. For example, the black I have studied intensively will often move his right

> hand and arm synchronously with the initial consonant, then join in and move his left arm more rapidly with the vowel, and then both together and with reduced speed with the terminating consonant. His whole body does this...[while] The white, for example, tends to keep the rhythm contained in a serial flow. There is a relative absence of a syncopated counterpoint of one side of the body in relation to the other. (Cited in Hall 1983:168)

The entire life pattern of a culture is expressed in large rhythmic strokes, and is related to that culture's unique relationship with the universe. I have stated that the foundation of a human development research process is love and an empathetic immersion in someone else's world.

Hall noticed this too. He writes:

> ...there is a relationship between rhythm and love: they are closely linked. People in general don't sync well with those they don't like, and they do with those they love. (Hall 1983:151)

I have often noticed, in interactions with native people, especially older individuals who have not spent a great deal of time with whites, that my entire rhythm pattern seems to change. The spaces between thoughts widen. The gestures soften. Even my breathing is somehow taken over by the compelling need to synchronize with the person I am interacting with. I discover that I am using speech patterns that are clearly those of my partners in the conversation. This is not, I stress, something that is "done", as one does a strategy. It rather arises out of the rhythm of the dance. And when I notice these things happening to me, the noticing itself draws me back to the beat I am so accustomed to, and I must listen all the more diligently, and again let go to the rhythms to which my partner is dancing.

Hall believes that both partners will adjust their rhythms to find some middle ground for the interaction (Hall 1983:152). While I am sure this is true, I am also sure that when I visit people in their own customary context, the compelling rhythm of life as it is lived out in that place between those people will dominate the interaction. Indeed, if it did not, my presence would have induced a kind of communicative schizophrenia, in which by rhythmic domination, I would have forced my partners in the action to be out of sync with themselves. Such a usurption no doubt does occur in intercultural relations between dominant and systematically oppressed peoples, but it is precisely what is to be avoided in research interactions aimed at promoting authentic human development.

This kind of letting go of patterns one is profoundly attached to would, I believe, be impossible to anyone who did not want to let go and did not want to be led by relative "strangers" into another world. Further, I do not believe the connection that enables synchronization to begin across cultural lines could occur if it were not rooted in a deep, heartfelt caring for the well-being of the other.

Underdevelopment

A substantial portion of the writing about "underdevelopment" from thinkers representing a variety of ideological schools tends to hold the "peasant" and his society squirming at arm's length between antiseptic theoretical tweezers while a polite discussion is conducted on why it is, or how it came to be, that this specimen of humanity has fallen victim to such unfortunate circumstances.

In the words of Denis Goulet, who is here speaking about "underdevelopment" as a set of conditions prevalent in pre-industrial societies the world over,

> Underdevelopment is shocking: the squalor, disease, unnecessary deaths, and hopelessness of it all! No man understands if underdevelopment remains for him a mere statistic reflecting low income, poor housing, premature mortality, or underemployment... The prevalent emotion of underdevelopment is a sense of personal and societal impotence... One cannot understand... how cruel that hell is by gazing upon poverty as an object. (Goulet 1977:23)

The concept of "poverty" is itself an abstraction, however. "Underdevelopment" may indeed be shocking to a naive stranger who has never before encountered anything but the relative luxury of industrial societies. But this shock gives way to one of three conditions: numbness, withdrawal, or acceptance.

1. Numbness

Numbness produces a clinical detachment that sees only pathologies and symptoms, but which feels nothing. From this condition, one remains forever an outsider to the "world" which is to be transformed during the development process. This condition is justified in research literature as being one of "objective reality". The belief that "all aspects of complex phenomena can be understood by reducing them to their constitutent parts" (Capra 1983:59) does not account for the intricate dynamic of the living whole.

> In the twentieth century...physics has gone through several conceptual revolutions that clearly reveal the limitations of the mechanistic world view and lead to an organic, ecological view of the world which shows great similarities to the views of mystics of all ages and traditions. The universe is no longer seen as a machine made up of a multitude of separate objects, [how much more a human system] but appears as a harmonious indivisible whole, a network of dynamic relationships that include the human observer and his or her consciousness in an essential way. (Capra:Ibid)

Our cultural formation includes mistrust and even a fear of other people (now buried deep beneath the veneer of liberal rhetoric), as well as a paranoia about losing control. Losing control, we have come to believe, can come about through the contracting of someone else's disease, through their treachery, or merely through our own unfamiliarity with their world. Numbness is the result of switching off our faculty of empathetic caring so that we do not have to allow our innermost selves to be exposed to that admittedly vulnerable human condition of sharing a world with strangers.

2. Withdrawal

The second response to the shock of underdevelopment may follow upon the first, or may, especially in those trained to look at the world through the lens of theory, constitute a primary coping strategy.

Withdrawal can take several forms. It can mean actually fleeing the scene that so paralyzes the imagination of the stranger (as in, fly in, look around, take notes, fly out), or withdrawal in a more subtle form through a process of reifying the life world of the developing subject.

Examples of the later range from a trivializing label such as "the suffering poor" to more serious attempts to construct a feature list. Words such as "diseased, oppressed, servile, passive, and dependent appear on these and have all been lumped together as characteristic of the 'culture of poverty'" (Lewis 1971). This type of withdrawal is a retreat into theory in that stereotypical images of poverty and theoretical constructs that explain underdevelopment (such as dependency theory[13]) are projected on to the lives of developing people.

This projection enables us to keep a safe distance as we are shocked, angered, dismayed or bewildered by what we "see". Such withdrawal also precludes the sharing of a world together because "they" are in the "world" of underdevelopment while the stranger is in a world of his own.

3. Acceptance

To accept something means a) to take what is offered or given; b) to receive willingly. (Webster) When I enter into the world of strangers I become a culturally handicapped person. I cannot at first make sense of much of what goes on. When a disabled person accepts a disability, she or he does not assume a passive stance toward it. On the contrary, there is an active going out to meet the problem, of wrestling with it, and of so making it one's own that the problem itself becomes a kind of partner that accompanies the person into the world. No longer is the person overwhelmed or "victimized", though at times the feelings of frustration and even profound rage may black out every other awareness. Still, there is a matter-of- factness in the relationship between the person and the handicap that blends the two as one and thus transcends the separating wedge of the category "disabled".

Acceptance of one's own awkward ineptness in social interaction, of a return to a station not unlike that of a small child in adult company who understands only the roughest outline of what is actually going on, and even then with substantial misconceptions, is a humbling experience.

I am so used to being able to communicate my meanings to others. I am used to grasping the subtle nuances of inflection and gesture that may even be invisible to the speakers themselves. I am used to commanding attention and respect for my ability to understand and articulate complex social situations. Yet when I step into someone else's world all of this is gone--like dust before the wind. And yet if I do not let go of these social weapons (for indeed in my fright and insecurity I dearly wish to use them as such to gain some measure of control of a situation I do not fully understand)--if I do not let go I cannot share in the vulnerability of life as it is lived. I will instead engineer a temporary and pale imitation of an interaction pattern with which I can predict and control the behavior of others in a way that allows me some measure of comfort. Obviously these patterns will come from my world, i.e. from indust-reality. This is in fact what we have done in the constitution of European forms of education in native communities in North America and in third world countries.

The foregoing discussion has attempted to share both the reasons why it is important to begin development education research by simply getting to know people in the context of their world, and at the same time to suggest that we (the products of industrial cultures) have a cultural predisposition and a tradition of academic training urging us to avoid such openness, especially in a strange "world". I do not feel it is necessary to proclaim a rigid rule such as "never review literature about a people before you meet them", but it is essential that a researcher be able to stand out of the shadow of what is "known" about something in order to be able to experience that "thing itself" (Husserl 1970b). Merleau-Ponty writes that the process of phenomenological investigation moves toward "achieving a direct and primitive contact with the world and endowing that contact with a philosophical status" (Merleau-Ponty 1972:351).

Pearce describes that contact in terms of the metaphor "category". Until my relationship with experience is known to me as a coherent pattern, I tend to select out those aspects of universal experience that I can make sense of. Different meaning-making systems select out different aspects of being, perhaps because it is those aspects and none other that fit well into one's comprehensive experience-organizing pattern Kenneth Boulding has called "the image" (Boulding 1956).

But in the case of a cross-cultural investigation into the very process of human becoming, it is necessary that an investigator become, to some degree, an insider. In order to be able to endow with "philosophical" legitimation those aspects of universal phenomenon that are experienced by cultural insiders, one must first know what those aspects are.

An example will assist us here. A Dogrib woman about 30 years of age approached me in the context of education work and told me about an incident she had participated in the week before. She told me her little boy had been sick with a stomach ailment that had persisted for several months. She said she had taken the child to a medical doctor several times, but to no avail. She then took the child, an eight year old boy, to a traditional medicine man. This she did at the prompting of her mother and against the wishes of her husband who felt that such activities were superstitious vestiges of a primitive past.

The woman was herself unsure about what had happened. She knew what she had seen, but her formal schooling (grade eleven) and the general mind set of the English speaking community she worked in did not permit an adequate integration of that experience. The result was a sort of experiential dissonance; an anomaly that could not be explained away. While she doubted the meaning-making system that told her that what she had seen could not "really" happen, she could not explain away her experience.

She reported that the medicine man was old. He did not speak English. He had a helper who tended fire and retrieved objects when asked to do so, but the helper seemed to be incidental to the healing process. The shaman asked the child to lie down on a blanket on the floor of the living room. Only a coal oil lamp flickered dimly. He picked up a rattle and began to sing and then he shook the rattle over the body of the child. He continued to do this as the boy's mother and grandmother, and several members of the healer's own household looked on.

Suddenly he reached his hand over the abdomen of the child. Then, his hand passed through the bared skin as though it were a vapor until it completely disappeared inside the child's body. He then pulled out a large living beetle (it was the winter season, perhaps -30C outside) some two and one-half inches long. This he showed to the child and everyone else in the room, daring any who doubted to touch the insect. None did. He then tossed the insect onto the floor. It started to crawl toward the child. He picked it up again and swallowed it whole.

The boy's recovery was rapid and complete. His mother's gratefulness was only clouded by her confusion of mind. She approached me as a friend, but more as a sort of reality check. "What 'really' happened?", she wanted to know.

My mind reeled. My first inclination was of course to reject the apparent delusion and to look for some trickery, as well as a psychological mechanism that had triggered the healing. I stopped short. I told her that I did not know what had "really" happened, but until I found evidence to the contrary, I was prepared to accept her story at face value; that at least on one level (that of experience), what she saw is what in fact had occurred.

I know that I do not see with my eyes. I see with my brain. My brain organizes electrical impulses received from my retina into coherent patterns. The structure of these patterns is, I believe, altered considerably by the meaning-making grammar inherited with language and culture.[14] How do I know that she did not see what she thought she saw?

In several subsequent discussions with native healers, I attempted to pursue the woman's question. "What really did happen?" The closest to an answer that made sense in my reality system was given by a Navaho healer.

He said that all material reality, including human bodies, are moving and alive. This movement is like the flow of a river. If you can see the river moving in your body and in the body of another, it is possible to slip your hand in between the ripples.

What the healer pulls (or sucks) out is not the illness per se, he explained, but a psychic manifestation of the spiritual and psychological roots of the illness.[15]

In contemplating what native healers and hundreds of eye witnesses have said about such healing procedures[19] (also practiced in the Philippines), I could only say that these people are experiencing different aspects of universal reality than I am. My Cartesian world view does not permit me to embrace the Navaho healer's explanation wholeheartedly. Neither does it accept that young Balinese girls can walk barefoot and even play in a pit of burning coals. But the healers heal. The children do walk on fire and they are not burned.

While there must indeed be "some explanation for all of this" on the level of roughing out the shape of the world of others so that I can step into it, the explanations are irrelevant. They may, in fact, prove to be barriers that permanently block access to that world, because they are grounded in an entirely different world than the phenomenon in question.

Michael Polanyi writes

> the principles controlling a comprehensive entity would be found to rely for their operations on laws governing the particulars of the entity in themselves; and...at the same time the laws governing the particulars in themselves would never account for the organizational principles of a higher entity which they form. (Polanyi 1966:34)

An explanation of some aspects of the total reality of "the world", no matter how detailed and coherent, are preoccupied with rendering phenomena (like the healing episode described above) sensible, when in fact sensible is precisely what they are not, until one has actually entered into "the world" of which these phenomena are aspects.

This stepping into a world is not unlike the quantum leap from learning a second language piece by piece to generating original thought in that language. One is virtually in another system of meaning making.

Following Pearce's (1977) description of a learning process: 1) Roughing in the form; 2) filling in details; and 3) practice dwelling in the new category of being in a var- iety of ways--I am describing the research path leading to the possibility of stepping into the "world" of developing subjects, so that in partnership with them, that world can be transformed[16] and new possibilities may be generated.

Though we are still "roughing in the form", the outer shape of "the world" of the Lac La Martre Dene people, we have begun to touch on one important aspect; what it is like to relate to other human beings in that world. We don't "know" this as an insider knows it. This we shall never be privy to. But we know more than we did before our visit. We have touched the hearts of others and they have touched us. We now have a sense, a feeling that cannot yet be articulated but which is none the less very present in our developing category of a "world". This "tacit knowing"

(Polanyi 1966) becomes ground and context for sifting through what traditional academic research has to say about that world.

For in order to complete the "roughing in" process we now must review that historical and anthropological literature written about, in this case example, the Dene people. More particularly, we need to examine studies that attempt to reconstruct the lifeways of the Dogrib people before contact with European culture. We then need to be able to trace the cultural evolution that occurred from contact to the present, and then describe and link the present economic, political, social and cultural condition of the community(s) to those immanent processes from their historical-cultural past.

The chapter following touches on what this review process yielded in terms of Lac La Martre Dene people, and then proceeds to a methodology for making that tacit immanence that is known subjectively explicit, objective, and thereby subject to transformation. I include it not so much for its content, as for an example of what an educator needs to know to begin working with any people of another reality system than his own.

Part Two: Entering the World of Another

What is known (in the academic sense) about the Dogrib lifeways prior to European contact is known within the general framework of a reality system utterly foreign to that of the Dogrib people. This "knowledge" has been pieced together by academic researchers from the journals of explorers, missionaries, and traders, as well as from the diligent work of a small number of twentieth century ethnographers. This general picture is larger than the Dogrib nation, as it includes all Athapascan-speaking peoples living in the Mackenzie drainage system. These people are now known as the "Dene"--a Chipewayan word meaning "the people".[1]

The cultural pattern of the Dene at the time of contact with European groups was that of a nomadic hunting and gathering people. Their survival skills in an extraordinarily harsh northern environment made them an essential link in the soon-to-be established wealth extraction mechanism. Not only were they to become the primary producers of the main commodity (furs), but they were also called upon to provide food and navigational skills without which it would have been virtually impossible for Euro-Canadians to establish themselves in the North and to systematically exploit its wealth.

What happened to the lifeways of the Dene as they passed through the processes of commercialization, missionarization, and colonization is a story that has never been coherently articulated by the Dene themselves in a way that will allow them to perceive the immanent structures created through that process which influence their current shaping of the "world".

It is not merely that I, as an educator, need to know this story. I need to know it with Dene people. For their telling of the story will provide a new "standpoint" (Novak 1977), that of developing subjects articulating a vision of the future (a new category of "the world" into which they may step) from a knowledge base of their own making. A careful literature review reveals a cultural pattern not unlike hunting and gathering people anywhere in the world. The Dene lived in small family groups, and through an intimate and deeply spiritual relationship with the land, won a living from one of the harshest environments on earth.[2]

Now these same people have all but deserted the land they loved for so many generations and are living in tiny villages, most of which were once centers for the commercialization of Dene production or for the saving of Dene souls.

Lac La Martre has a population of between 235 and 250 people.[3] More than half of these are under the age of twenty-five years. It will be helpful to describe the cultural discrepancies between various age groupings in the community because these represent, in many ways, separate but overlapping universes of meaning making. First, however, an historical perspective is required.

It is important to realize that it was only some thirty years ago that Dogrib people begin moving en masse from small nomadic family groups following the game patterns in the rugged bush and barrens of the Northwest Territories, into villages created by the Canadian government. They did so under considerable pressure. Their patterns of production had shifted during the fur trade era from a focus on food production to a focus on the production of furs. The furs were sold and food was purchased from trading centers operated primarily by the Hudson Bay Company. Certainly the Dogrib never stopped hunting for meat or fish, but the emphasis of their work did shift, and a dependency on cash and what it could buy was created.

After World War II, the bottom dropped out of the fur trade market. The price a family could get for their furs (if they could sell them at all) was not enough to purchase food, let alone other needed items such as steel tools and traps, rifles, ammunition and clothing. Crushing poverty was exacerbated by a series of health disasters (imported by the fur traders), that wiped out hundreds of men and women and children from virtually every family in the Dogrib nation. Croup, measles, smallpox, tuberculosis, pneumonia and, in 1928, a deadly flu virus killed without mercy.

Many who died were the hunters upon whom families depended for their livelihood, leaving behind dependent children and wives, who suffered a great deal from their loss. The period from 1928 to 1938 was truly a "decade of desperation"[4] for the Dogrib. Those who survived were weakened in body and scarred and broken in spirit.

Not only did the Dogrib have to contend with their own misery, but they also struggled under the burden of government-imposed restrictions on hunting and trapping, something the treaty parties had promised would never happen.[5]

Though countless pleas for help were sent to Ottawa, both by the Indians themselves, and by others such as Bishop Breynot who petitioned on their behalf,[6] the unofficial policy of government during that period seemed to be to look the other way in hopes that the problem would die off or otherwise fade away. Indeed, "many people believed that the Indian problem would solve itself".[7]

It was not until the late 1950s that the ponderous machinery of government, motivated by a liberal sense of responsibility for "our Indians", began to take steps to provide services for the Dogrib people.

Consider though, the incredible change that was required in the lives of Dogrib families in order to avail themselves of the new centralized "services". Except for an occasional sojourn by the men and older boys to trading centers such as Fort Rae at Christmas and perhaps in midsummer, the lifeways of Dogrib people still followed the traditional rounds of spring hunt, fish camp, fall hunt, winter trapping (an innovation which came largely with the fur trade), and spring hunt again. Several times a year, but especially at midwinter and midsummer, families would gather for times of feasting, celebration, drum dancing, gambling, contract negotiations, and socializing. The rest of the year was, in today's terms, a herculean struggle for survival.

One of the oldest people in Lac La Martre, Mr. Joe (Zoe) Fish, describes a portage on a typical journey from Fort Rae Edzo to a camp near the current site of Lac La Martre, a distance of about seventy-five air miles. This trip was made many times during the course of a year to obtain supplies. This particular trek took place during the brief summer months.

> Then when we head back on the portage there would be lots of mosquitoes and sometime we couldn't even breathe because of so many mosquitoes and we'll pack things on our back. The portage was long and we pack things like gas, oil, canoe, and gear. And by the time we get to the other side we would be so tired. The sun would be so hot and there would be lots of mosquitoes. Sometimes they would be travelling with kids and it would be poor travelling... Sometimes we walked through muskeg and water up to our knees. We pack with a load on our back,

> and those who carried the canoe are helpless from mosquitoes and you couldn't wear too much clothing.[8]

Women carried an equally formidable burden in their role as mothers and sustainers of Dene family life. What follows is a description of making camp along the trail in winter. Bear in mind that the temperature is probably between -25C and -45C. The speaker is Mary Madeline Nitsiza. She was born in 1913.

> So sometimes when he goes out trapping, he'll leave me alone with the little ones and I would get my own firewood and other chores around the camp. And sometimes when he's breaking trail, he would leave a spruce behind, and that would mean that we'll make camp and stay overnight.
>
> I would leave one of my little ones in the sled and the other on my back and set the tent up by myself.
>
> And sometimes I get worried cause it getting dark...because my little one might cry...and then when I set up the tent, I would put up the candle stick and light it so my little one wouldn't be in the dark. And then I would unhitch the dogs and tie them up, and [I] would get worried cause my husband might get back early [before camp was set up] and I would chop firewood to last all night.
>
> Then I would bring the frozen fish in so they could thaw out by the stove and I would get some spruce branches for the dogs, so they could keep warm...and while I was doing this, I was carrying my little one on my back.
>
> The next day we would continue on travelling, and when we stay in camp for long, then I would get moss [from under the snow] for diapers... I raised all my children like that and I have a total of fifteen children.[9]

One other dimension of a woman's life was described more succinctly by another elder, Pierre Beaverhoe. While travelling (remember that the Dogrib were a nomadic people)

> The women pack their baby on their back, and walk behind the dog team and they'll unpack the baby from their back and breast-feed them. While feeding thebaby they used the tobaggan as shelter from the cold wind. [The temperature could be -40C][10]

Nearly everybody in Lac La Martre over the age of thirty-five years either grew up in the context described above or lived in that context for all of their childbood and a significant portion of their adult life.

As a non-Dene educator, I needed to become aware of those world-shaping experiences that constituted daily life for the Dogrib people. The values and attitudes of that now invisible world are embedded in the Dogrib language, still spoken by everyone in the community. Some of that world is still present in every gesture and every knowing glance as eyes meet and faces change like shadows on the afternoon snow.

Try to imagine the enormity of the change for women like Mary Nitsiza and even her children, to suddenly (almost as if by magic) be transported from the lifeways these passages depict into a welfare house in a village, with a monthly cheque, a store, and no truly meaningful (survival-dependent or development-promoting) work to do.

The profound sense of loss, the limbo-like feeling of being uprooted, of suddenly being nowhere in particular; the denial, the anger, and confusion that invades the souls of human beings when all the props of life are suddenly taken away can somewhat feebly be compared to the sudden loss by death of one's family in a single terrible night.

There is one important difference, however. When one loses a loved one, it is clear what has happened. One is expected to grieve. Long-standing cultural mechanisms for discharging the intense feelings of loss and despair are set into motion. One's friends, indeed in native cultures, the entire community, rallies in recognition of one's loss and the need for support, encouragement and re-orientation.

The Dogrib people had lived in much the same way for countless generations. While it is true that the fur trade brought changes, it did not totally disrupt, until the very end, the Dogrib patterns of social relations specific to family life and the role of the extended families as the basic production unit.[11]

Life had been hard in the bush. Lac La Martre Dogrib elder Pierre Beaverhoe comments

> When I was very small, our people used to really struggle to raise us. They struggled and struggled to raise us and they were poor as I remember. I was very small when I went trapping with my father. That time we didn't have a tent to stay in [during the winter trapping season the temperature ranges from -25C to -45C]... Now we don't have to struggle to raise them and we have everything.[12]

A person who has lost a loved one does not have everything. One has nothing. The world is empty. Over and over again Dogrib elders told me that before they were poor, they had to struggle in order to live--but they had one thing they now no longer have: the struggle that gave meaning and texture and purpose to life.

The irony of their situation is this. In moving into settlements, the material needs they had so long struggled to meet against inconceivable (to us) odds were not only met, but now seemed trivialized by the ease with which they could be obtained. After all, the government now provides free health care, free education for the children, free housing, and a cash flow in the form of family allowance, old age pensions, welfare, and make-work programs.

This cash can be converted into imported goods at the Hudson's Bay post, and into alcohol; in short, into a lulling, artificially generated security blanket of dependency. Of course, one can always hunt, fish and trap if one wishes. What is different is that it is no longer absolutely essential for survival to do so.

Anthropologist, linguist, and humanist Edward Sapir had this to say about what happens to native people who have been uprooted culturally.

> When the political integrity of his tribe is destroyed by contact with whites and the old cultural values cease to have the atmosphere needed for their continued validity, the Indian finds himself in a state of bewildered vacuity. Even if he

> suceeds in making a fairly satisfactory compromise with his new environment, in making what his well-wishers consider great progress toward enlightenment, he is apt to retain an uneasy sense of the loss of some vague and great good, some state of mind that he would be hard put to it to define, but which gave him courage and joy that later day prosperity never quite seems to have regained for him. What has happened is that he has slipped out of the warm embrace of a culture into the cold air of fragmentary existence. (Sapir 1970:96-97)

Coupled with this fragmentary sense of loss is the immanence of cultural bewilderment, and of pure suffering that is the legacy of mass death by disease, slow starvation, and of an increasing sense of servility to other men that pervaded the lives of Dogrib people from about 1870 to the end of World War II.

These forces cannot help but shape the shaping of the world for Dogrib people. They too will be present (like a sick uncle in the next room) in the intimate intercourse of mother and child as a new generation of Dogrib children are raised up, along with the traditional beliefs about what a human being is, what it is to live a life and how a life should best be lived.

Peter Marris has written an illuminating essay on the subject of loss and role the human response to loss plays out in the processes of disruptive social change (Marris 1975). Marris delineates three rather fuzzy stages of grief and its sublimation when a people are uprooted from the context that has given meaning to their lives.

He traces the stages of initial numbness, confusion and despair and a gradual re-integration of meaning and life in a wide variety of social contexts; from marriage breakdown in Britain to African urban migration and tribalism in Nigeria.

Most significantly Marris suggests that the loss of context, such as occurred in the case of the Dogrib people

> impairs the ability to attach meaning to events, and hence to learn from them how to survive. At the same time, loss is usually threatening; the victims recognize that unless they learn to understand the situation and cope with it, they will be helpless to secure a tolerable future. The disorientation of purpose is therefore a source of profound anxiety, as well as desolation... (Marris 1975:159)

Then Marris makes a highly critical observation: "It undermines the structure of meaning on which learning depends" (Ibid).

The clear implication is that human development, which is inseparable from learning, may be seriously impaired and even blocked by a severe loss of context experience. If what Marris suggests is the case, we are not merely dealing with straightforward learning in the promotion of development among such people, but we must also deal with a kind of cultural healing process, of grounding and making whole what has been decontextualized and fragmented.

In so far as learning may be understood as the integration of new patterns of activity into the structure of meaning (Boulding, 1956 has referred to this structure as "the image"), it is essential that the structure itself, the integrating frame into which new patterns are to be assimilated, is itself reasonably intact.

Major structural transformations referred to by Kuhn (1962), Ferguson (1980), and Capra (1983) as paradigm shifts are shattering and utterly disorienting events in the life of an individual. In the collective life of a culture that forms the constitutive elements of a unique "world" of meaning, such a shift can be nothing less than catastrophic.

It becomes clear that at the very least, midwifing the rebirth of a "world" requires extreme gentleness, patience and wisdom.

Marris suggests three principles for assisting a people in the process of reconstituting a meaning system after a severe loss experience. His observations are corroborated by Jackins (1973, 1977, 1983) in his works in the peer-counselling field, as well as by my own experiences with indigenous people in Canada and Africa.

1. The process of re-formation will entail conflict. People will need to express their extreme feelings of anger, frustration and hostility. They will express them to whoever will listen. It has been my experience that listening

with an understanding heart, without defending myself in any way, has enabled my native and African counterparts to discharge feelings of rage that were completely blocking their ability to function as creative, intelligent human beings in certain areas of their lives.

A parallel process may be seen in social movements such as the black power movement in the United States or native political patterns in Canada which, during the 1960s and 1970s, were markedly obstructionistic and belligerent, before they moved into a period of internal reconstruction.

2. The second phase Marris describes is that of differentiation or distanciation during which groups who have experienced great loss need to organize their own patterns on their own terms without outside interference from non-members of the group. This pattern is seen in the black, native and women's movements in North America, and it is one that is difficult for non-oppressed people to understand.

Many well-meaning, dedicated white radicals working with black or native groups nearly to the burn-out point have suddenly, and apparently without warning been asked to go away. Feeling shocked, bewildered, and betrayed, these individuals who felt that had invested their lives (though it was rarely more than a hectic and underpaid two years) in the cause of black or native people were suddenly cast off like an unwanted garment.

It is important for development educators to anticipate this eventuality and even to aid its advent. To acquire the sensitivity and humility to recognize that it is time to stand aside is, I believe, a necessary ingredient in the personal development of a development educator.

3. The third principle Marris suggests is that time is needed. The process of decolonialization, as it has been called by writers such as Memmi (1967), Fanon (1963, 1978), Carnoy (1974), and Freire (1970, 1978) is not, as these writers seem to suggest, a mere matter of resolving conflicting "interests". It is also the far more subtle process of reconstituting the structure of meaning that is "the world" within which developing people dwell. That process is, I offer, the essential activity of development.

This reconstitution of a world involves the retrieval of now abstracted universal values and meanings from the collective memory of a people,

> and the re-rooting of these in the contemporary context in which people find themselves. That context must itself be transformed toward a new vision of human possibility arising from the creative imagination of the people,[13] and then be clearly articulated and set before them like an emerging horizon. Such a process will take many years to unfold.

The question human development research needs to answer is, can that process be effectively sped up through some intervention without inhibiting the execution of the essential task facing developing people; i.e. the reconstitution of a meaning-making system that is whole, integrated, and utterly their own?

Children raised in the Lac La Martre context, by parents who were themselves "the little ones" Mary Nitsiza and women like her carried on their back, certainly do not share the same meaning-making system that I derived from childhood in Marinette, Wisconsin, U.S.A. in the 1950s and 1960s.

Frederick Jackson Turner, an economic historian from Wisconsin, wrote an influential and penetrating essay called "The Frontier in American History" (Turner 1983). In it he argued that the values foundation of the American personality was shaped by and for life on the frontier.

This mind set emphasized

> ...rugged individualism, self-reliance, a jealous readiness to defend property, quick-triggered, gunslinging violence, aversion to government interference, a profligacy with 'free' natural resources, bold risk taking and antitraditional irreverence, rough egalitarianism, as well as lavish hospitality to fellow achievers and wayfaring strangers. Frontiersmen were private entrepreneurs who smiled a lot but carried guns. (MacLeod 1982:40)

Indeed this description could well be that of the mind set and the values foundation of the "good-old-boys" network now passing through college fraternities and football teams and into corporations and executive positions across the continent.

As Jack MacLeod, in his insightful essay on American culture An American Odyssey puts it, "Try as we may, no people, no nation, can be removed from its formative experiences" (Ibid).

Erik Erikson, if not directly influenced by Turner's essay, then certainly under the shadow of its influence, discussed the childraising practices of American women in terms of the raising of young frontiersmen and frontierswomen. Erikson is concerned with the shaping of a nation, and how its values, interaction patterns, indeed its construction of reality, is molded through the childraising practices of its families (Erikson 1963:292-294).

Erikson's work was heavily influenced by Freud and the psychoanalytic school. He is concerned with peeling away the layers of culture, like an onion, in order to find the soft inner heart. While it is true that the formative experiences of a nation of people cannot help but influence their shaping of the "world", it is all too easy to impose a theoretical construct on someone else's world that completely misses the point.

This, I believe, is what Erikson has done in his treatment of Dakota childraising and culture (Erikson 1963:114-157). In his eagerness to explain, he has peeled away layer after layer of the onion until there was nothing left. This "void" he attempted to fill with a stage theory developed within the context of psychoanalysis (Erikson 1963:273).

When faced with apparently incompatible elements in Dakota culture, counterforces that combined in the construction of the "typical" Dakota male or female personality, Erikson struggled to make sense of a blend that is integrated by forces that were inaccessible to the range of his analytical frame.

Faced, for example, with the terrible beauty of the sundance ritual as an ultimate expression of the Dakota sense of what it is to live a life, Erikson completely misses its phenomenological meaning which, I suggest, is its only meaning relevant to the process of human development. Instead he offers an explanation of events that are culturally incomprehensible to him.

> The ceremony would then be the climax to the vicissitudes of that deliberately cultivated (yet, of course, long forgotten) rage at the mother's breast [he means that mothers deliberately frustrated boy infants to make them angry, but highly motivated achievers] at a biting stage which interferes with the long sucking license. Here the faithful [i.e. the sundancers] would turn the consequently awakened sadistic wishes which the mothers assigned to the future hunter's ferocity, back against themselves by making their own chests the particular focus of their self torture... It is hard for our rational minds to comprehend--unless we are schooled in the ways of irrationality--that frustrated wishes, and especially early, preverbal, and quite vague wishes, can leave a residue of sin which goes deeper than any guilt deeds actually committed...
> (Erikson 1963:148-9)

He goes on to suggest that this expiation for collective tribal guilt is carried out in a public ritual through certain representatives, "exceptional individuals who feel their culture's particular brand of inner damnation especially deeply..." (Ibid).

In conversation with Dakota and Lakota participants in the sundance, I have been given a very different view. In the first place, there is no sense of expiation for the past. Indeed, the entire ceremony is regarded as a reconstitution of "the world" at a higher level of spiritual understanding.[14]

Fasting, piercing, and the four-day marathon vigil are all understood to be important mechanisms which, when combined with the spiritual roadmap of the medicine wheel, literally disassembles one's developed relationship with the world and re-assembles it on a higher plane. It is a traditional native example of an intensified and ingeniously orchestrated experience intended to speed up the reconstitution of an individual's reality system. The hardest part of the sundance to endure, say the dance masters who guide dancers through the experience, is not the four days one is fasting and dancing, but the other 361 days of the year until the next round of sundancing. The ceremony is a highly concentrated model of how to live a life. It is a pedagogical tool of the highest order. There is no such thing as ritual per se in the sundance, in so far as ritual means the empty repetition of ceremonial actions. No two Dakota sundances are the same. Even within the course of one four-day round, the ceremony is individualized for each participant within the patterned structure of tradition.

Ceremony, including those which are a part of the sundance cycle in Dakota tradition are, in reality, a form of curriculum for life. A relationship is welded between the dancer (who is student), the community (which participates as onlookers), the dance master (an elder who is the teacher), and the body of knowledge about the nature of the process that is life embodied in the sacred teachings, which includes an elaborate world view metaphorically represented by the medicine wheel and a cycle of stories and legends.

I have not "explained" the sundance here, it should be noted, any more than I could have "explained" to you the sweet ecstasy of the Mozart Requiem or the exquisite beauty of a ballerina in full flight. For the sundance is, in the doing of it, a guided process of human development. What Erikson missed was the most vital, the most dynamic, indeed the essential reality, of Dakota culture--he missed the spiritual core of the culture. That core permits cultural insiders to integrate what to Erikson were irreconcilable contradictions--contradictions he attempted to explain away in gushes of Rousseauian romanticism interspersed with a crude psychologizing of Dakota ceremonies on a level far removed from their essence and their meaning to the Dakota people.

In particular Erikson's treatment of the sundance and the vision quest, practices still very much alive, failed to reveal the powerfully integrating forces released by those ceremonies and their potential to form the base of a human transformation process in individuals and communities. As a psychiatrist, Erikson is ostensibly a healer. As a healer among the Dakota he would fail utterly, for he would be unable to tap the regenerative powers hidden in the heart of Dakota culture.

A foundation assumption upon which this thesis stands is that it is the task of educators to promote the unfolding of human potential. Human development and learning are so bound up with one another as to make them actually undistinguishable on many levels. I have highlighted Erikson's work here to illustrate two related points:

1. Cultural researchers who seek to unfold the petals of the delicate flower of culture without tearing it to shreds must be extremely wary of importing analytical models and systems into the process. Our own culture system, that is, the structure of meaning we ourselves dwell in, already distances us from any easy apprehension of any other reality.
2. Erikson's motive for research involvement with the Dakota and other people was never made explicit in his work. It is clear, however, that he mined those cultures in order to assimilate certain aspects of them into his pre-cast conceptual system of human development. The Dakota were not asked for their insiders' interpretation of their own meaning system. Nor were they asked to critique Erikson's conclusions.

I believe this "objective analysis" of Dakota culture provides a clear example of a sort of research that development educators must eschew. There are four reasons for this, all rooted in the primary assumption that development research should promote human development:

1. Development research should bring the research/educator into a closer relationship with the people.

2. Development research should be a collaborative process of exploration and interpretation, mainly guided by cultural insiders.
3. The final outcomes of the research should in some way contribute to increased self-knowledge of the developing subjects. Hence it should be a learning process for all involved.
4. The research should mobilize people for action on their own behalf, or at least enable them to identify potential directions for change.

What we are discussing is the question of what an educator needs to know about a people whose development he is attempting to assist in order to even begin to be of any use to them.

The Dogrib people of Lac La Martre are a case in point. My own research in that community will be explored in some depth in the following section in order to show: 1) the delicate nature of cultural knowledge, 2) the importance of leaving cultural knowledge within the interpretive framework of cultural insiders, 3) one approach a cultural outsider can use to collect and analyze cultural knowledge, and 4) how that collected knowledge, generated by the community itself, can be used to guide educators in promoting an authentic human development process.

While the particulars of Dogrib cultural history and the details learned from Lac La Martre people about themselves are fascinating, still I remain the true subject of this discourse. For I am asking what I must know, how I may know it, and who else must share the knowledge with me concerning who a developing people were and what they have experienced, that stands behind them pushing them as it were, into the present.

I must know these things in a conscious way because my own standpoint, i.e. my inherited interpretive frame, and my choices and beliefs, have me shaping a very different world than that of, for example, Lac La Martre Dogrib people. If I am to join partners with them in the reconstitution of reality--which is in one sense what human development is--it must be their reality and their process of transformation. Yet it must also be mine. My roots are nourished in the shifting sands of Euro-american industrial culture: "indust-reality" (Toffler 1980). My training in the applied social sciences confirms a subtle sense of superiority that I am inclined to act out (even if I don't believe it intellectually) in interactions with other cultures. I have inherited a set of assumptions about cultures and races other than my own which, when puffed and polished into the form of academic theory, has been called the "linear development concept" or "modernization theory".

Modernization theory posits that all societies on earth will, given the proper stimulus and under certain loosely defined conditions, develop in exactly the same way as have western industrialized Europe and North America. All people will eventually become like us. We are at the apex of human development. Our social traits and our cultural inclinations are those of evolved man. Our articulation of "reality" is reality. All else is a pale imitation, a primitive approximation or a perverse deviation.[15]

Modernization theory and its implications for human development will be touched on in a later section within the context of a discourse on the human development process. But it is important for me to realize that a subtle sense of cultural superiority is truly present in the world view I have inherited, along with my sense of who I am, from my earliest childhood roots.

It was that embedded sense of racial, class and ultimately cultural superiority that shaped the conquest of the Americas, the building up of the "golden triangle",[16] slavery, the movement of waves of immigrants into the American colonies, the push westward that displaced and uprooted so many Indian nations, and later, the colonization and economic domination of most of the world by industrial powers.

With that formative experience in my cultural memory, I have much to be wary of as I seek partnership with developing people of indigenous background, and so do they. Have I come to save them? Do I believe, deeply, beneath a delicately applied veneer of liberal ideology, that these "poor" people, so long the downtrodden, can now assume their rightful place in the arena of civilization and progress if only good-hearted individuals like myself will find a way to educate them, and to motivate them to participate in the "modern world"?

I have come to realize that the entire planet is "underdeveloped". The well-being or the destruction of any people is inseparable from the well-being and the destruction of all of us.

Francis Bacon taught us that "knowledge is power". Generations of scholars and researchers have believed this dictum and have built empires on its foundation. Jürgen Habermas reminded us that such knowledge is generated in order to predict and control (Habermas 1971). Its real use to the people who possess it is that it affords them mastery over the world, including other human beings in it.

There is emerging, however, a new breed of scholars to whom knowledge is not power, but empathy. The outcome of this knowledge is collaboration and community. It is a knowledge based in mutuality; in the conjunction of entire universes of meaning. Its "interest" to use Habermas' terms, is promotion of the essentially collaborative enterprise that is human development.

Habermas understood certain aspects of what I will term empathetic knowledge. Explaining his category of historical-hermeneutical knowledge, he writes

> Hermeneutic knowledge is always mediated through [the interpreter's]...preunderstanding, which is derived from the interpreter's initial situation. The world of traditional meaning discloses itself to the interpreter only to the extent that his own world becomes clarified at the same time... He comprehends the substantive context of tradition by applying tradition to himself and his situation. (Habermas 1971:309, 310)

Habermas goes on to speak about why it is that individuals from different worlds will freely disclose their own standpoint, allowing it to be interpreted through the experiences of the other.

> hermeneutic inquiry discloses reality subject to a constitutive interest in the preservation and expansion of the intersubjectivity of possible action-oriented mutual understanding. (Habermas 1971: 310)

This "practical" interest in mutually transforming a world that is increasingly being shared is the basis for all human development research. For me it is eminently practical to submit to a process that will change me and all those whom I influence, if that change leads me and my collaborators into a richer articulation of our humanness. By assisting Dogrib people (or any others) to unfold their potential as individuals and as a people, I am thereby engaging in a process of transforming my own culture, my own world, and my self.

Part Three: The Lac La Martre Dene Values Project: A Case Study

Introduction

As co-ordinator of educational programs for the Dene Nation during 1982 and 1983, I made several trips to Lac La Martre to meet with community residents and school personnel about the relationship between education and the ongoing development of the community. During these visits I learned of a growing values rift between the younger and older generations. It was interesting to note that despite the obvious differences in standpoints between Dogrib youth and their elders, there was still a deep sense of respect for the elders.

It is in part, I believe, this prevailing sense of respect which prevents Lac La Martre younger people from openly confronting their elders on issues which deeply disturb them. From the point of view of the younger people (ages eighteen to thirty-five), elders are not in touch with the "real world" of the 1980s. They are living in the past. And yet, because of the traditional power they hold in community decision-making, they are continually placing obstacles in the path of the younger people who want to "get ahead".

At the same time they are continually criticizing the young for not working hard enough, for preoccupying themselves with means and methods that are decidedly non-Dene, and for turning their back on the virtues and values which form the foundation of traditional Dogrib culture. Abuse of alcohol, gambling and promiscuity are frequently mentioned as blatant examples of the decline of morals among the young, who are thereby rendered unfit to lead the community now or in the coming years.

Perhaps the most hurtful allegation, from the standpoint of the process of human development in Lac La Martre, is the suggestion that the younger generation are incompetent parents, and are now raising a generation of Dogrib children who will be completely lost to the culture, and even to themselves.

The elders do indeed make these allegations,[1] and yet there is an interesting, though less public, feeling that the "pot is calling the kettle black", as it were. Younger people argue that they are the kind of parents they are largely because of how they were parented. They say that gambling, gossiping and other harmful preoccupations fill the lives of elders to a much greater extent than they do the lives of the younger generation (gambling is indeed a popular pastime of older people, who frequently play cards into the early hours of the morning).

It is true that younger people control the purse strings of the community, and this is clearly a source of conflict and frustration between generations precisely because, though economic and institutionalized political power tends to be concentrated in younger people, very little can actually happen unless the approval and support of the elders is obtained.

Increasingly the elders have resorted to obstructionist tactics the younger people complain: "They will not listen to us. They only stand in our way by refusing to sanction our plans and programs. So we go around them."

While it is true that programs and plans go on with or without the elders' direct approval, nothing of importance can go ahead if the elders actually oppose and make their feelings known. "What is most important," say the more thoughtful of the younger people, "we are the hands and eyes of our elders. They need our strength. We need their guidance. They have brought us into the world and taught us how to live in it. They are our first teachers."[2]

In small native communities, the school often becomes the outward manifestation and focus of the subtle ongoing generational rifts described above. When Jim Martin became the principal in 1983, it became clear to me that a door had opened into the process of human development in Lac La Martre. The reason for this is because both Jim and Marlene Martin, besides being experienced teachers in northern native communities, possess a rare and wonderful quality. They love the people of Lac La Martre. They listen to them, not only with the ears of educators and administrators trained in indust-reality's universities, they listen with their hearts. They do not trample on the feelings and wishes of the people. They honestly believe that the Mezi School belongs to the people of Lac La Martre. They are sincerely committed to an educational process that will increasingly enable Lac La Martre people to control and benefit from their own school on their own terms.

It became clear to me, in consultation with the Martins, and with Lac La Martre residents, that a research process involving younger people and elders in an effort to reconstruct and articulate principles of Dogrib education and childraising would serve four purposes simultaneously:

1. The process of articulating a new vision of human purpose and possibility would be set in motion in the form of a dialogue between tradition and imagination.
2. The research process would facilitate a collaboration, and perhaps a functional reconciliation between the elder and younger generations.
3. A new type of leadership would emerge that would tend to facilitate process in the community rather than competition for control.
4. The process and outcomes of the research were likely to contribute to an improvement (on Lac La Martre people's own terms) of the educational program offered through the Mezi School.

The process of articulating a vision of transformation would be set into motion. What had been subjective, tacit, and immanent in the lifeways of everyone from the oldest elders to the youngest children--the acting out of, or the sublimation of traditional Dogrib ideals of what a human being is and what the purpose of life is--could now be made objective, articulated and hence subject to transformation.

Because of an infusion of non-Dene values, many of them corrosive to the foundational structure of meaning that was traditional Dogrib culture, a new vision could thereby be articulated. This is not a once-for-all process. It is rather the commencement of a perpetual dialogue between tradition and imagination.

The process of the research would generate collaboration between the elder and younger generations. This collaboration would have spin offs in every domain of life in Lac La Martre.

In order to discover which ideals about human beings are being passed on in Dogrib childraising, younger people would have to ask their elders to share what it was like to be a child in the traditional setting of family camps and bush life.

My role as a trained researcher would remain fairly incidental to this mutual exchange of ideas about childraising and education, except for providing methodological consistency to the process. The value of that consistency would only become clear as conclusions were drawn on what had been articulated through the process.

Lac La Martre is a Dogrib speaking community. Since I do not speak Dogrib, the only help I could provide in what was to become essentially their research project, was in guiding the questionning process in a descending spiral of depth leading to the core of Dogrib culture.

The Dogrib dialect (of the Athapascan language group) is an extremely complex and subtle language that differs from English in two important ways. First, it is a verb-dominated language. English is noun dominated. The difference is the difference between a motion picture (verb) and a snapshot (noun). Noun-dominated languages such as English conceptualize the world in terms of steady states--bits of causes and effects frozen in space like the figures on Keats' Grecian urn.[3]

Verb-dominated languages generate a view of the world that is in perpetual process. Beginnings and endings and causes and effects are transitory abstractions of an eternal sense of movement. Most indigenous languages of North America, including the Dobrib language, are verb-dominated languages.

The second way the Dogrib language differs from English is that the English language achieves a precision of expression of specific shades of meanings through an extensive vocabulary (borrowed from many other languages), and through a precise grammar structure which locates meanings in time and space. It does not depend for its success in communicating complex ideas, on a great deal of information outside the spoken or written communication itself. In other words, English is a low-context language.[4]

Dogrib is a high-context language. It depends, for the successful communication of subtle shades of meaning, on a _relationship_ between the speaker, the listener, and the particular context that gives rise to the communication. Unless these remain in balance, dimensions of meaning are easily lost in verbal interactions.

Younger generations of Dogrib are losing "the high language". They cannot understand what the elders are saying, especially in formal or oratorical communication such as the telling of a traditional story. Even though many of the words are known, their traditional constellation to indicate certain universes of meanings simply escape younger listeners.

What is happening is that the context which gives rise to the meaning structure that was traditional Dogrib culture is no longer shared on a day-to-day basis by young and old together. The Dogrib spoken by younger generations lacks the philosophical and spiritual dimensions that pervaded a life lived in communion with the land.

The implication of these language peculiarities for research are that in order to effect a meaningful collaboration between younger and older generations, individuals needed to be found who could speak and understand the "high language", current Dogrib usage, and English.

The individuals in this category tended to be over thirty years of age, educated (to at least grade nine), and from families that had spent a portion of their time in the bush during the time the children were growing up. These individuals tend to spend a great deal more time with the elders, and indeed cultivate an active interest in learning as much as they can from the elders about Dogrib traditions. As a consequence they are trusted by the elders, but are somewhat of an enigma to the younger generation, even though they are tolerated, and for the most part respected for their knowledge.

Because these individuals provide an essential link in the dialogue between tradition and imagination, a dialogue about the ongoing evolution of the culture, they emerge as a new type of leadership--the facilitators of a collective process. Their "interest" (as Habermas uses the term) lies largely outside the realm of any particular group in the community. Their role tends to be non-political and non-confrontational. Their contribution is largely in the realm of integrators and clarifiers of competing world views.

Finally, the process of research would contribute, in all probability, to an "improved" (in Lac La Martre terms) program of learning at the Mezi School.[5]

The more that is known in a conscious way about:

1. traditional ideas of childraising contrasted with current practices and attitudes;
2. traditional notions of how to live a life;
3. traditional ideals concerning what a good person is;
4. Dogrib teaching and learning styles embedded in language and culture;
5. the aspirations of elders for the role of formal education in the human development process in Lac La Martre;

and other related issues, the easier it will become to articulate community shared ideals for education in Lac La Martre that can be translated into viable programs.

It should be noted that in no way would it be possible to perfectly reconstitute the traditional meaning system of Dogrib culture as it was lived three generations ago. Hans Georg Gadamer, in response to Schleiermachers' reconstructionist hermeneutics, writes:

> The reconstruction of the original circumstances, like all restoration is a pointless undertaking in view of the historicity of our being. What is reconstructed, a life brought back from the lost past, is not the original... a hermeneutics that regarded understanding as the reconstitution of the original would be no more than the recovery of a dead meaning. (Gadamer 1975:149)

The essential activity of this research is the articulation of "the world" as it is through the medium of an active relationship with the past. What is articulated about traditional ideals will necessarily be rooted in the context of the present. The process of articulating past ideals is essentially an interpretive process.

That process is conditioned by two sets of realities, one of them is phenomenological (which includes the river of history). The other is mystological, and is essentially spiritual and transcendental in character. This second reality is the realm of unactualized human potential. It is the realm of the ultimate unknowns that underlie and order all of human existence. It too, is an essential component of culture. It is the realm of potentialities latent within human beings as these have been discovered and articulated through the genius of a people.

This knowledge, which is essentially religious in character, continually draws human beings out of themselves, out of their current condition, and into an eternally self-renewing vision of possibility.

So, it is not only the present, thrust forward by the river of history, that conspires to re-interpret the Dogrib traditions. There is also the magnetic pull of a tacitly known potential that collaborates in the interpretive process.

The Research Process

1. Selecting Collaborators and Translators

After obtaining permission to conduct the research from the chief and council members, a process proceeded by visiting key individuals in their homes and discussing at length the aims and possible outcomes of the research, it was necessary to find one or more Dogrib collaborators who possessed the qualifications discussed above relative to knowledge of the "high language".

As there are relatively few individuals who possess the requisite background, it became a question of 1) in whom do the elders trust to confide their deepest concerns, and 2) who is available to work for four to six weeks on a temporary, full-time basis, interviewing, translating and preparing transcripts for typing.

Based on these requirements, two individuals (Michael Nitsiza and Francis Zoe) were selected. One of them, Francis Zoe, was already employed as the native language instructor for the school, and so Michael Nitsiza became my principal (paid) collaborator. Each of the elders to be interviewed was also to receive small honorariums. Because Francis and Michael are friends, both deeply committed to the preservation of Dogrib culture, it was clearly a case of "two for the price of one", as they have worked together as a team throughout the project.

2. Funding and Support

A small grant from the Boreal Institute for Northern

Research at the University of Alberta covered a portion of the cost, including travel, honorariums, and production costs. The Dene Nation provided a generous contribution in staff time, secretarial help and equipment.

3. The Research Plan

Open-ended interviews would be conducted in the Dogrib language which would amount to guided discussions between the interviewers[6] and each of eight to ten community elders. The elders were selected by a consensus of the interview team as being both the best known to team members and also the elders best able to articulate the lifeways and ideals of the Dogrib culture. Ten names were originally selected, but one elder was sick, and another was out of the community during the period the interviews were conducted,

4. Preparing the Interviewers

After many hours of consultation with my Lac La Martre co-researchers about what we would have to ask the elders in order to get them to speak to themes of relevance to the school program, the questions displayed in Figure 1 were composed. They represent my composite of those conversations. The purpose of composing questions ahead of time at all was merely to provide interviewers with a guide for their conversations with the elders. It was never our intention to ask all of these specific questions to all

Figure 1: Guidelines for Interview/Conversations in Dene Values Research

1. What are some differences you see between how your parents and grandparents raised their children (including you) and how people are raising their children today?

2. In the old days, when people said so-and-so was a "good child" (i.e. a "good boy" or a "good girl"), what did they mean?

3. How did parents teach their children things like respect for elders, being polite, being honest, being humble, being gentle, being strong-willed and independent, not talking too much, especially about other people, and other important values? How were you taught these things?

4. In the old days, what did they mean when they said someone was a "good man" or a "good woman"? What would they be like?

5. What was a "bad man" or a "bad woman" like? What did the others do to such a person?

6. When there were important decisions to be made in the old days, who made them, and how were they made?

7. What do you think about the way important things are decided today in the community?

8. Do you think it is good the way children are being raised and taught today? Why or why not?

9. Could you suggest how the elders could help to build a better future for the children? Do you think the young need their elders? Why?

10. Dene children are losing their language. Do you feel it is important that a way be found to make sure the language is not lost? How? Why is this important? What is lost when language is lost?

11. If you could give any advice you wanted to a young mother about how to raise her children, what would you tell her? What should she desire her child to become? How should she go about her job as a mother? What should she do? What should she not do?

12. Is it important that children still learn how to live on the land as people used to? Why?

13. What sort of future do you see for your grandchildren?

elders in any particular order or with any particular wording. Our main concern was to stimulate comments in the areas indicated by the questions.

As a team we spent a great deal of time discussing the questions in terms of how to phrase them in Dogrib so they would be as open-ended as possible.

Then a sample interview was conducted, translated and transcribed. As a team we analyzed the text from the point of view of interview technique and discussed to what extent the interviewer had facilitated or impeded the free flow of ideas thematically suggested by the questions.

It was interesting that, despite universal participation in the discussions leading up to the framing of the questions, all four of the team members (including me), were still uncertain of the intent of one or other of the questions at this point. As we were only using the text of questions as an anchor point, it became necessary for us to evolve a one-mindedness about what we were after.

Our first interview confirmed what the Dogrib team members had anticipated; that once an elder got the drift of what we wanted to talk about and came to accept that we really wanted to hear what he or she had to say, the elders would talk freely and at great length. The problem would be to guide their talk into the general topic areas of concern to this particular research effort without stopping the flow of creative expression.

The mere raising of these issues in our team discussions seemed to be sufficient preparation for the team. It should be noted that all of these individuals had spent many hours in the company of these same elders. They were personal friends and honored relatives of the Dogrib team members. The challenge was to carry on the research activity in a way that fit into those already existing patterns.

5. The Interview and Transcription Process

Team members visited elders in their homes, yards or smoke houses and taped conversations that ranged from one to three hours.

These tapes, one by one, phrase by phrase, were listened to, exhaustively discussed by Dogrib team members, and translated into English. I spent several days providing explanation of English usage and searching for words and phrases that best accommodated high-context Dogrib meaning structures. After several days my help was no longer needed and the team continued on their own, listing occasional problem words or phrases for future discussions.

In all cases the final authority on what became "text" rested with the Lac La Martre team. The style of English into which the Dogrib texts were rendered is obviously a Lac La Martre dialect of English. I have not attempted to translate these texts into standard English, feeling that to do so would be to even further alienate the Dogrib meaning structure from the context which gave rise to the texts in the first place.

6. The Thematization Process

The next stage was drawn out over a period of several months. I read and reread each of the texts (ten to twenty-five typed pages each), making notes about each text and looking for recurring themes. After the fourth reading I felt confident enough to begin bracketing[7] passages in the texts and assigning them a number which referred to a certain theme.

As I performed this exercise I was well aware of the need to collaborate with the other team members, now 1,500 miles to the north. I none the less persisted with the exhaustively detailed work of thematizing the texts as I understood them. This portion of the work took some eighty hours of concentrated effort.

I then travelled to Lac La Martre and shared with the other team members what I had done. They seemed all too willing to approve my work without criticism. I therefore decided to put it to the test by selecting the longest of the interviews and asking them to generate themes and bracket passages as I had done.

I should point out that text analysis of this kind is a highly abstract and sophisticated process which escapes many trained academics who either lack the patience or the global processing patterns it demands.

The results of the Lac La Martre team's effort was as follows. I had identified thirty-four themes (i.e. fields of concern or interest). They identified twenty-eight, of which twenty-two were either exact or approximate matches to the themes I had selected. In no case had they listed a significant theme that I had omitted.

7. Method of Text Thematization

What follows is an example of how themes were drawn from a text. Each interview text was assigned a number from 1 to 8. Each generated theme was also assigned a number from 1 to 34.

A chart such as the one shown in Figure 2 was established displaying the theme names and numbers, with space to record locater numbers under each theme.

Figure 2: Theme Chart

1. Family Life
2. Alcohol
3. The Role of Women
4. The Role of Men

(etc.)

Beginning then with interview #1 on page 1, a passage was identified as speaking to theme #21, "The Hardships of Life in the Old Days". Then, on the theme chart, next to the #21 was written "1-1", meaning that on page 1 of interview 1 a passage appeared referring to the theme of "The Hardships of Life in the Old Days".

Working on from Figure 2 above, the completed chart looked as follows for the first two items. The first digit is the interview number, the second is the page in the interview text on which the passage appears.

Figure 3: Numbering the Passages

1. Family Life
    - 1-2
    - 1-4
    - 2-2
    - 2-1
    - 2-2
    - 2-15
    - 3-1
    - 4-1
    - 4-7
    - 4-9
    - 4-10
    - 4-15
    - 5-1
    - 5-11
2. Alcohol
    - 1-2
    - 1-4
    - 1-12
    - 2-1
    - 2-2
    - 2-3
    - 2-5
    - 2-7
    - 2-8
    - 2-13
    - 2-14
    - 2-19
    - 2-20
    - 8-2
    - 8-4

What follows is a verbatim passage from one of the texts to show how themes were generated and identified. The superscripted numbers refer to generated themes. When brackets within brackets appear in the text, it simply means that within a long text that speaks to one theme, there are shorter texts that speak to others.

> ^{3}[Those girls that became a full-grown women, ^{32}[she'll would think carefully on her own] and she'll would work carefully toward people and

> ^{30}[she'll be kind-hearted and she'll help the people that are poor,] and ^{7}[she'll be a good worker], like in that way, $^{10 \& 9}$[and when she becomes a full-grown woman she'll act like one and she'll wouldn't walk around and visit other people for so many years. And when you're full-grown women you don't look around and see who's walk around,] and she'll always by herself]. That's the kind of women they call good women. ^{27}[But today if we told these stories to the girls, they'll swear at us and would said, 'What does that old lady know about life...?']. (Mary Madeline Nitsiza)

In their order of appearance in the passage, the following themes were identified:

Theme	#3	is	"Role of Women"
	#32	is	"Self-Reliance"
	#30	is	"Taking Care of Others/Sharing"
	#7	is	"Attitude toward Work"
	#10	is	"Vices/Bad Qualities"
	#9	is	"Virtues/Good Qualities"
	#27	is	"How Today's Children are being Raised"

Hence, seven overlapping themes were touched on in one paragraph. Not all passages were so diversified in their thematic content. Often a bracketed passage referred to only one theme (say, for example, "The Role of Women") and provided more detailed commentary in that one theme area.

The final stage in the thematization process is the arduous task of transposing all bracketed passages to separate theme sheets under the appropriate headings. So, for example, all passages referring to theme #14 "Dene Pedagogy (Teaching and Learning)" were assembled in a single compilation. This procedure was followed for fifteen of the major themes that most spoke to the questions guiding the research process.

One of the advantages of this research procedure is that the material gathered is virtually inexhaustible in its potential to generate themes and address community issues, in that it is so intimately grounded in the speech world of the community itself. The text and identified themes that we did not develop into anthologies are equally rich in data which will be useful in many community applications.

What follows are selected passages from the generated theme "Dene Pedagogy", as well as comments derived from my own or other team members' observations about the passages.

"Our parent would make snowshoe and we'll sit around them and we'll watch and learn from them."	learning by watching; the silent internalization of the category "making snowshoes"
"They'll tell us how to drill a hole in the stick and that how they'll teach us. We'll drill through snowshoe and they'll bend it, smooth it, then we'll drill it for them."	co-operative projects with explanations; learning is a relationship between the task, the learner and the instructor
"We'll learn everything by watching our people work... When they teach us to set nets, then we'll get a long pole to use as a jigger to set nets with and then they'll would teach us where to set the nets."	participation, modelling, and explanations are all involved in the learning process, but watching is primary

"We use to work [with elders]... And then they'll teach us how to make campfire and give us direction of the wind so the fire wouldn't blow on us, and when it snow, how to make shelter. They'll would tell you everything that you'll need to know during those times."	practical work with teacher doing the thing that needs to be learned: context of the task in practice is employed to teach the task
"And when I work on moose's hide she'll be right beside me and show me what to do and it take a day or so... Then she'll tell me to try one on my own and I'll would do it."	teacher is a relative, i.e. there is a relationship already established; presence of competent elder; modelling; practice; explanation; patience & perseverance of teacher; discipline & perseverance of student
"We didn't know anything about alcohol and brews, so the old people... would gather and tell stories and we'll listen to them."	storytelling; elders tell, young listen; alcohol has gotten in the way of this natural process in recent times
"My mother would talk to me in the morning and evening." [She would give advice like] "When you see the old people, care for them and help them with their chores, you're live long."	quiet time used for direct advice giving on behavior, values and moral issues; consequences explained
"And if they give you advice, keep it and remember cause if you don't you might be like a piece of stick that breaks and that what happen to many of our people who drink alcohol. They don't listen to their parent and drink and soon they'll either drown or froze to death."	listen to the advice and teachings of parents and elders and live those teachings; not to do so can mean death

"So if people [talk to you], young or not make sure to listen to them."	listen to each other; all are teachers, all learners in the community
"And...when evening comes I would tell them stories or give them advice... [I would say] 'My son... when I talk to you, listen careful cause I'm your father now and I'm mother too.'"	intimate, loving relationship: a caring relationship between children and elders is the basis for listening and learning
[I would say] "My son, don't talk about the people that stay around us and don't talk about the girls or a woman, cause you're here for being with the women, and one day you'll have a woman on your own."	there is a moral standard (we're all one and our lives are interconnected) elders repeat and give advice re this standard as a part of moral instruction
"And then if you see the people working, don't think it's not your business cause you learn from how they'll work, so if you see them working, then go to them and watch how their hand work, and soon it be your turn to have a home of your own, and if you watch them carefully, then you'll live by it."	advise, instruct children to "watch our hands", i.e. to watch intently how to do something (learning how to learn). The reason why to do this is given. Listening with not only ears, but mind, heart, body and spirit
"By watching how their hand work on these things you're learn how to work on these things by yourself."	children need to learn to watch, concentrate, image, visualize, remember--set the category and step into it
"Their parent will teach them and they'll teach them good so they'll live good in the future And those who live by it, are not poor like, but those who doesn't live by it are poor,	education is connected to successful living. That's what it's for. This awareness (what education is for) was always instructed with every lesson.

really poor."

"The Dene language is really important, cause if they remember our words, then they'll might tell their children our words of the past."	Knowledge, visions, values, and technologies are embedded in Dogrib language; these will not be passed on to future generations if the language is lost
"Before when my father or other people raise me, they tell me to listen to other people cause when they talk to you, they be talking like your father is talking to you, and when an old women talk to you then listen to them cause it would be like your mother is talking to you."	All the community are co-educators of the child and each other; listening means hearing and heeding
"Out in the barrenland, then it would be storm or blizzard, then they'll tell us to turn back... [They then give direction] 'If you know it's going to be bad weather by the look of the sunset, then head back to camp, and if you don't make it back to the camp...make sure to dig in the snowbank and make shelter just enough room to crawl in and make air hole so we could have fresh air...cause it be warm in there and our clothing will be soak and wet from heat...if we don't make an airhole then our clothing would freeze on us.'"	Detailed explanations were often given of how to deal with certain situations in the future. Survival depended on listening, visualizing clearly and remembering exactly what to do. Hence the capacity to visualize a category of being so clearly and in such detail that one can, when necessary, enter into it--live it in the real world--is a key cognitive skill that was nurtured and developed. The failure of this capacity could mean death.
"And they'll be very quiet when the elder tell them stories of the past or any stories. And they'll behave themselves and think wisely."	great respect for teachers shown by actions; quiet and attentive concentration was developed

"He told the boys to make their own campfire and he'd give them matches and axe and some drywood out in the barrenland. And he told the boys that the only way to make campfire is to start a fire and you're make fire by drywood's chip... So he just sat there and watch the boys try to make campfire and that it good, cause that is the only way that they could learn is to be out there with someone that knows about how to survive in the bushes."	the real situation and context of the task is present; learner learns by doing with guidance
"Nowadays, those married couple and those who have kids drink and gamble. So how could they remind their kids of good behavior and how our people were like. And their kids as they grow up, they'll do as their parent did because they seen their parent did these things."	Moral behavior is modeled. How we are as persons is the curriculum for our children.
"Little boys would listen to their elders as they talk and they wouldn't make a sound or would not move as they talk."	respect of the learner for the teacher; great respect for learning
"When people live together as a group they don't throw away another's words, but act on it."	advice giving and taking is taken seriously
"If I was younger...I would...select one or two to teach their children in the old ways."	Teaching is a one-on-one affair
"All of you people here are like my own daughters	Elders teach with love; the relationship of

and sons..."	teaching is first established
"If we have a child we love them and care for them... [Teach] a girl then she become a mother ... Teach them good... When they are old enough to work on their own then it will be their turn to teach their young ones."	as you raise and teach children, bear in mind that you are educating the parents of the next generation

8. Composite Theme Statements

The next stage of the research procedure was the most removed from a true participatory process in the case of the Lac La Martre study. For each of the generated theme anthologies, I produced a composite statement summarizing what I perceived to be the essence of what the elders were saying on that particular theme. In each case I attempted to speak as though I were an elder speaking. Wherever possible I used actual excerpted quotations. My main objective was to artistically reproduce the affective dimension (i.e., the feelings) of what was being said in tandem with a summary of the ideas being expressed.

My reasons for producing composites were:

1. to make a summary statement on each theme available to use in verification with the elders;
2. to attempt, for my own education, to internalize what the elders had said and to invest what was to me a translated text with affective content and, in certain cases, with specific development-oriented significance, while still remaining true to the meaning structure and intent of the original text;

3. to provide concise statements that could be used in community consultations to address issues and set goals.

It would have been useful to spend time with community residents consulting about the theme anthologies in an attempt to draw closer to an insider's view of what the elders said, but financial, and particularly time constraints, did not permit this. I believe that, with technical assistance, the Dogrib team could well have produced useful composites. I also suspect theirs would have been somewhat different than my own. I attempted to reproduce the elders' emotional standpoint, something younger generations of Dogrib, struggling to free themselves of those very feelings, would likely have a difficult time doing. Perhaps here, more than anywhere else, lies an advantage as well as a service that can be performed by a cultural outsider. The role of outsiders or "the stranger" (in Schutz's terminology) in development processes, especially research, must always remain a sensitive and controversial area.

9. Verficiation

The next step in the research process was to verify with the elders interviewed in the initial stages of the research, as to whether or not the composites accurately reflected what they wanted to say on that particular topic.

This was accomplished through the following procedure.

Michael Nitsiza (my principal collaborator) and I visited each of the elders in their homes. We discussed the research project at length, reading back composite statements (translated into Dogrib) for their comments.

The results were, in many cases, overwhelming. When I would finish reading (and after the translation had been given) a long and impassioned outpouring would erupt from the old men and women before me. On several occasions I asked my collaborator to translate before the elder was finished speaking, and I was motioned into silence. Finally the translation came

> "What you have written is exactly what we have been trying to tell our young people. Please, go and tell this to the young people as you have written it."

"Did I leave anything out?", I would ask. "No", they would answer, and then proceed to repeat back almost word for word the entire composite statement.

As the elders listened and spoke, their entire families were gathered around. Touching many of the important families, as we did during our visits, and sharing ideas with them about subjects related to the research was in itself an exercise in pedagogy as much as in research.

That knowledge could be created out of their midst; knowledge that, as would be shown by the public meeting held the following Sunday afternoon, could have direct practical application to the life of the community, is something that seemed to excite many people.

I regretted the fact that I was an outsider to Lac La Martre, because it was clear to me that the process we had undergone together could continue, more deeply, and with truly transformative consequences for the community.

10. A Sample Theme Anthology and Composite

What follows are selected passages from an anthology on the theme of "How Today's Children are being Raised", followed by the complete text of the composite. These are given to provide the reader with a clear example of the relationship between a text-generated theme anthology and a created composite, which is essentially a piece of creative writing using actual theme material as a medium. It should be noted that the context that gives meaning to this or any particular theme is all the other themes, and indeed all the experiences I have had with Lac La Martre people. I am confident that what I have written does reflect by way of a generated example, the ideas and feelings of Lac La Martre elders on the topics suggested by the theme.

Theme 27: How Today's Children are being Raised

[8]"When they raised us
they taught us everything,
now the children only being
taught the white man's way
...they don't know much
about our ways of life."

"Nowadays they have every-
thing and that why they're

do whatever they're want to do... [That's why they] don't work good and don't listen to their parent."	
"They don't listen to their parent and...teacher, so their teacher get angry... cause they don't listen. Then their parent get mad at the teacher."	
"When you're drink you'll leave your children at home...alone...who is going to raise the children?"	
"I don't think they are being kept good and seems like they are raise by themselves."	
"...and that [alcohol] is the thing that affect the children...girls are going bad and the boys don't listen or obey their parents."	
"Gambling...affects the family as much as alcohol. It also leave the children home, without their parent and girls go bad and boys stay up late."	lack of parental supervision or letting the kids run wild is major complaint
"They don't want to work hard as we did."	
"People like myself [elder] have no use for the children cause their children don't listen to them and don't seem to care."	note resentment and sense of separation between generations
"...before we didn't have school but the children really listen to their parent... [They don't think about the	

consequence of not listening which is] to be like a piece of stick that is broken."	
"Their parents never said, 'My child, why are you doing this or that?'. That why the boys get worse..."	
"It seem like women [current mothers in the community] don't teach their children cause every night they [the mothers] want to play cards, or bingo, or checker game, and they don't know what the kids are doing at home."	Evening was the time to tell stories and teach (i.e. talk to) the children
"These girls [today's generation] it seems to be no use to teach them, cause they don't want to do these things [i.e. handicrafts] and they don't come around and watch us work. Even the girl that stay with me don't come."	
"If they only speak in English than it's going to be bad, cause when their parents talk to them, they might beat up their parent..."	elder beating is a growing problem; here the speaker is indicating that such things arise as the communication gap widens between generations.
"They...don't like now to go hunting in the bush and set traps, set nets and make campfire. They don't know how to sleep without tent...chop firewood or how we make breakfast early in the morning."	
"They're only know the white man's way of life... they don't know how to	

hunt for yourself..."

"Now we have everything but before we didn't have the grocery that we have now."

"More than half of them don't attend school that often. And they just don't seem to want to go to school... We keep asking them to go to school, but they don't listen to us sometime..."

"We didn't...have cards... television...movies or show...tape recorder... record player...and that why we didn't play in the evening. But now it's not like that... The children have everything to play with, so they'll play all night."

"But now our children don't obey us like before maybe because we now have everything that we need."

"Children [won't] listen to us or obey cause they think they're living in the white man's world now."

"If they're don't tell [i.e. are not told] these stories, they might not listen to the people, or wouldn't live like our people did or they might forget how our people were like."

"Before they use to struggle to raise their children... But now they're really are not doing too much."

today people don't have to endure the struggle that builds good character

Welfare dependency, stores, etc. have created a situation where children no longer really depend on their parents. Really they depend on the white government for money, food, house, clothes, education, entertainment. With the loss of that direct sense of survival connectedness, the strength of parental authority is undermined.

Before, children depended utterly on their parents to feed them, clothe them and protect them. This dependency gave power and respect to parents and elders. That power and respect had its basis in the survival of the people.

"These children that have mother or not, or... father or not, the same they don't do anything. Now that the government really treat the people good, they don't do anything."	implication that young model this, and also parents don't even raise their children. They ignore them. Children raise themselves.
"Now they receive family allowance and...welfare cheques and they don't struggle to raise their children like we did in the past... I worried how they going to live and how they going to stand up for themselves when they are spoil with the welfare cheques and family allowances. I'm sure they'll have very little to stand up with."	value of self-reliance being undermined
"We were poor but we listen to one another and we work toward the Lord... Now it's really is a big different and it's sad."	
[If we tried to discipline our children as was done in the old days] "they'll probably fight back and beat us up."	elders' fear of beating marks loss of respect as well as influence of alcohol
"Nowadays we are living in a luxurious world... We have houses to live in and when a child is born...we don't have to help others to give birth... [After] they started to raise their young ones with... modern materials...they'll hardly use their breast to feed the child with, none at all... And you don't hardly see anyone cuddling a child and feeding them."	Breast-feeding and cuddling are seen to be connected to the deep bond between parents and children that now seems to be broken. As breast-feeding and cuddling have disappeared, so has the bond between generations.
"Parents think if their children are not taught	

[the white man's way] then
they'll think they won't
get paid from welfare."

How Today's Children are being Raised: A Composite Statement

Nowadays no one has to struggle to live. We receive money from family allowance and welfare and we buy the things we need in the store. This is spoiling our parents of today. Because they don't have to struggle, they don't work hard and they don't teach their children how to work.

Today the children are only learning the white man's way--book learning, TV, comic books, have a good time. Today's children don't listen--they don't know how to listen to parents, elders and teachers.

In fact, when teachers at school get mad at the children for not listening, the parents get mad at the teacher for trying to discipline their child.

Many of the current generation of parents drink alcohol and play cards at night. The children seem to be raising themselves. They are allowed to run wild at all hours of the night--something we were never permitted to do. We were instructed by our fathers and mothers to be at home after dark. Our parents were there with us.

Those times when the family was all together in the evening, or sometimes in the early morning, were the teaching times. Our parents taught us how to make things. Our elders told us stories and we listened with all of our beings--our hearts, our spirits, our minds and our bodies.

Today's children listen that way to no one except maybe sometimes the television set or movies.

The children today don't realize the consequences of not listening. They don't see (because their parents don't see) the harmful things that are happening to our people from not listening to anyone. Our girls are going bad at an early age, having babies with no father to take care of them. Our young people are killing themselves with alcohol.

Nowadays we are living in a luxurious world. We have everything without struggling for it. But now we are separate from each other. We don't even help each other to give birth as we used to.

Today parents are raising their little children the "modern way". Almost no children are fed at their mothers' breast. None at all. And you hardly see anyone cuddling a little child and feeding him. How will these little children know that they are loved? How will they feel love for their parents and elders when they are older?

People like ourselves (elders) are afraid for the children. We can't reach them. They don't listen to us.

They don't seem to care about anything. When we are near them we feel very uncomfortable and angry but we don't know what to do. They won't listen. Our people are dying and they won't listen. We feel sometimes that we don't even want to be near the young people because they shut us out.

The parents today are not saying, "My child, why are you doing these things?". The children run wild and no one challenges them. No one listens. We are afraid to be tough on the young people like our parents were tough on us because they might beat us up.

Our young people are not learning the old ways. They don't know how to survive in the bush, or how to do handicrafts. They don't come around and watch us work, so how will they learn? How will they survive in the future?

What if they are caught in the bush in a storm or in the cold? How will they survive if they can't make shelter in the snow and make fire?

We want the young people to get an education, but more than half of them won't go to school. They are not learning the white man's ways to get a job, and they won't learn the Dene ways either. Both ways are necessary today.

Before we depended on each other to live. We needed each other. Today we depend on the government and we turn our backs on each other.

If the young people don't hear our stories they will forget the Dene ways. They will become white men, thinking and living like white men do. They will not listen to each other and they will live only for a good time. How will these children live in the future? How will they stand up for themselves if they are not taught to struggle now? How will they live with each other if they are not taught to respect and to listen now? What will happen to our people if these children, when they grow up, don't know how to work in the bush or in the white man's jobs? What will happen if the young people keep drinking themselves to death? What will happen to our people? What will happen to these little

> children we see around us today?
>
> Our children are losing their language and their culture. They are losing the knowledge of how to live life the Dene way.

11. A Public Meeting

A public meeting was called by the Community Education Committee to discuss possible changes in the school program. During the course of that meeting, an excerpt from one of the composites which summarized what the elders wanted in a school program was read in both Dogrib and English.

While Jim Martin, the principal, had long been aware of these aims, and had been trying to implement each of them in various ways, the community had never officially and publically articulated them as goals for a school program.

What follows then,is the excerpt from the composite of the theme "Attitudes and Ideas about Schooling" that was read and discussed at the meeting.

Attitudes and Ideas about Schooling

> Education of our children is very important. In the past, all of life the way we lived it served as education for the young. We didn't have schools. We watched, listened and learned

from our parents and elders.

Now we have a new school and we want our children to learn all that they will need for the future. Education is for life.

There are four things that should be taught in the school:

1. Academic subjects: English, reading, math, science, music and art history, etc.
2. Dene language and culture
3. How to survive and work in the bush: Dene bush technology
4. Religion: how to live a good life

1. Academic Subjects

It is important that the children learn English well (but not at the expense of forgetting Dogrib) so they will be able to take higher training to become a nurse or a community secretary or will be qualified for some other good job. Education is for life. It is to prepare the young people for useful service to the community, and to prepare them to earn a living for themselves.

The formal academic part of education needs to be balanced with teaching them the Dene way of life and the Dene language. You can't live like a white man all the time--just from books.

We need our children to go to school so we can depend on them in the future. This means both in the Dene way and the white man's way.

2. Dene Language and Culture

It is very important that our Dene language be taught to the children. This must happen both at school and at home. Parents must speak to their children in Dogrib and avoid using English. Much of the knowledge and wisdom of the past is contained in our language. All of our stories are in Dogrib. If the children can't understand our stories they will lose the knowledge of how to live life the Dene way.

Language and culture go together. Our children need to hear how our people struggled and worked in the past so they will be inspired to struggle and work for their children. That's how we have always lived. Besides learning how to survive in the bush, our children need to be inspired to struggle for the well-being of themselves and all the people. They need to be inspired to have strong wills and self-discipline.

They need to learn to listen to one another with all of their being--their minds, their hearts, their spirits and their bodies. They need to learn to respect their parents and their elders.

When elders spoke in the past, little children would become perfectly still and respectful. They would listen. We need to teach our children how to do this.

Elders should become a part of the school program. They should teach language, stories, how to survive in the bush, how to make things, and they should teach spiritual values--how to live a good life.

3. How to Survive in the Bush

It is important that our children learn how to survive in the bush. They need to know how to foretell the weather, how to make camp, how to travel, how to fish and hunt, how to find their way and how to survive in a storm. This should be a part of the school program. We should build a lodge or center in the bush and children should be taken out for weeks at a time to learn these things.

Elders and community people should teach in this program and be paid for doing it. This is an important part of education for our children. This time in the bush would also be a good time to learn the old way of talking in the Dene language. The kids around town don't know how to speak in the old Dogrib. That old way of talking has many meanings in it that our children don't know about today. Those meanings tell us how to live a good life.

4. Religion

For years we have wanted to have religion taught in the schools. Our children need to be taught to love God and to pray every day. They need to hear the wise teachings of God and the Church (Catholic) that tell us how to live a good life. This is just as important as learning English or other school subjects. They need to learn to listen, to obey, to speak only the truth, to be polite, to respect others, to be generous, to take care of each other and to love each other. This part of education can not be taught only at school or only at home. Parents and elders must help to teach the children. They need to receive the same teachings at home and at school.

During the course of the meeting it was agreed:

1. to commit money and to initiate an on-the-land

program as outlined by the elders, including the building of a base camp;

2. to immediately hire a religion instructor for the school and to begin that program in collaboration with the school principal;

3. to continue to support the development of the Dene language program and the regular academic course of study.

12. Publication and Control of Distribution

A one- and possibly two volume-publication is being assembled which will bind together

1. the original texts of the interviews;
2. the generated theme anthologies and notes;
3. the composite statements;
4. notes from community meetings about the implications of the research for further growth and development in community program
5. methodological notes detailing, step-by-step, how the research was done, so that further work of this kind could be undertaken by an independent community group.[9]

Ten free copies will be made available to the Lac La Martre Community Education Commitee, who will also hold the rights to distribution of the materials. The right to control distribution is an important one for such community research from two standpoints:

1. the community may decide that the material generated (or parts of it) is too sensitive for general distribution,[10] and/or
2. if any financial benefits are to be derived from the material, these should acrue to the community. It is their knowledge. They created it. They ought to benefit directly and indirectly from it to the greatest extent possible. The material will therefore be copyrighted in the name

of the Lac La Martre Community Education Committee.

13. Summary

In summary, the stages of the research, as they have been explained above were:

1. establishing relationships with key informants in the community;
2. developing a sense of issues in the community;
3. finding a research topic area that was key to the ongoing dynamic of community life as it was being lived (in this case the relationship of elder and younger generations and the ideals that guide interaction in the human development process as reflected in traditional notions of childraising still embedded in the culture and being lived out by all generations today--the visible focus was to be the school program);
4. the securing of necessary permissions and requisite funding to support the process;
5. the selection of co-researchers who were fluent in the "high language" and trusted by the elders, but who were also English speaking and literate;
6. the selection of which elders to interview;
7. the preparation of a list of guiding questions in collaboration with the rest of the research team;
8. the conduct of a sample interview and the training and briefing of the interviewers;
9. the conduct of the interviews;
10. translation, transcription and typing of all interviews;
11. a general studying of the transcripts;
12. the generation of themes and the setting up of and completing of a theme chart locating passages under specific themes generated from the text by a

bracketing and numbering system;

13. the transcription of bracketed passages to theme anthologies;

14. the discussion, with team members, of the significance of various theme statements;

15. the writing of composite statements summarizing the ideas and the feelings expressed by the elders (across all interviews) on each theme;

16. verification of the accuracy of the composite statements by visiting with the elders, reading the statements to them, and asking for their comments or advice;

17. using the anthologies and composites in consultations with various community groups on issues related to the ongoing development of the community to generate reflection and action upon the context that is life for Dogrib people in Lac La Martre;

18. the publication of a volume(s) which binds together all original interview texts, generated theme anthologies and composites, the records of meetings of community interest groups discussing the implications of the elders' comments for development in their domain of interest, as well as a description of how the research was done for permanent use in (and, of course, distribution by) the community.

Spin offs and Outcomes of the Research Process

The study described in the foregoing pages was primarily a first-level attempt to establish the usefulness of the methodology, as well as a means of generating themes that will now be developed in and through the education program in Lac La Martre.

There were a number of spin-offs and outcomes of the research that should be highlighted to complete the description of the process.

1. Process Outcomes

One direct effect was that the role of elders was highlighted within the community context. Much talk was generated among all age groups about the educational and counselling role elders played in traditional Dogrib culture. This alone contributed to heightened awareness about the importance for everyone of bridging the generation gap.

The fact that our research team approached elders and wrote down what they said so that many generations yet unborn of Dogrib children could have some contact with that precious cultural resource lent long-awaited legitimation and value to the elders. This they expressed openly both to me in the verification interviews and in several instances to the community during the public meeting.

Another important outcome of the research process was the occasion provided for community members to reflect on the fact of Dogrib culture as an evolving and yet unique way of being in the world. As discussed in Parts I and II, much of culture is lived tacitly, just beneath conscious awareness. Yet it shapes every dimension of our relationship to existence. Cultural transformation is the intentional reconstitution of that shaping process. I have argued that this can in fact occur, but only as aspects of culture are re-generated as conscious and objective reflection of their hitherto invisible and tacit structure.

The research process provided many occasions for dialogue among community members. Fundamentally, that dialogue is expressing the classic dialectic between traditional ideals and contemporary aspirations. The tension between these two is both necessary and creative.[11] What is absolutely deadening to the human development process is the stifling, from one pole or the other, of this dialectic of that necessary tension. I believe the research process described above provided a positive and creative mechanism for reviving and continuing that all-important dialogue.

The catalytic and clarifying effect the research process had on community attitudes toward the school were clearly manifested during the public meeting. The very raising of questions and the public articulation of the elders' four-point program generated two hours of heated public community discussion that culminated in a series of concrete decisions, on the spot, by the education committee and the school administration (as described above).

2. Product Outcomes

In addition to these process outcomes, a series of products have and will continue to be forthcoming from the research process. The published volume of interview texts will be used to compile local histories and biographies to be studied in social science classes. Edited sections of the interviews are already being used as readers in language arts classes in the school.

Tapes of the interviews will be used to put together Dogrib language instructional materials, including dramatizations and classical orations. As well, the rich repository of information about traditional lifeways is being used in the language and culture program as a primary curriculum resource.

Finally, the materials generated provide a detailed and comprehensive primary source for cultural researchers interested in Dogrib parenting and educational practices, as well as in many other dimensions of post-contact, pre-village Dogrib traditional lifeways, that has hitherto been unavailable. Indeed, in this area alone, the richness of the few texts already collected reveal a highly promising area for future research.

At this writing, I am planning another trip to Lac La Martre specifically to meet with various community groups to discuss the implications of the research for their work. While no final agenda has been fixed, plans to meet with the school board, school staff, a parents group, a group of elders, community political leaders, and people involved in economic deveopment are underway.

Some Implications of the Lac La Martre Study for Development Research

1. Development research must seek to disclose the tacit structure of meaning which organizes a people's relationship to the universe. That structure must be disclosed, not to the researcher, but to the people. It is the people who must, after all, transform that relationship on their own terms.
2. There is no way such a disclosure can occur without the collaborative guidance of the people themselves.
3. A "stranger", i.e. an outsider, can assist in such a research process, even if s/he doesn't know the local language, providing s/he is willing to surrender control of the interpretive aspects of the research to cultural insiders.
4. The articulation of unactualized potentialities, of a vision of some new aspect of being in the world, or merely of some always known but rarely spoken set of ideals, can have a galvanizing, even electrifying, effect on whole communities. Even if all a development educator did was to mirror back to a people a vision of human possibility that was hitherto hidden in the spiritual core of their culture, that mirroring alone can move thoughts and hearts. Such a mirroring can be the beginning a powerful transformation processes. This will initially be reflected in a

dialogue between tradition and imagination.

The Research Context of the Lac La Martre Study

The Lac La Martre research process, showing up as it did many aspects of life as it is lived among the Dogrib people that were hitherto unarticulated, made it very clear to me that much of my own world view concerning the nature of human nature and the process of human development had been accumulated experientially but never brought to conscious knowledge and articulated.

In attempting to grasp and to mirror back to Lac La Martre people the principles of human development articulated by their elders, I had to be able to recognize that articulation in the Lac La Martre context even though they were particular expressions of universal principles, and though they were couched in metaphors and a meaning universe quite distinct from my own.

As I struggled to find words for what I was sensing intuitively, I found a certain body of literature (namely the transformationalist literature) extremely helpful to me. I found that as I read, my research activities were informed by the universal nature of the insights of writers such as A. N. Whitehead, Joseph Chilton Pearce, Erich Janch, Fritjof Capra, Ilya Prigogine, and many others.

These writers assisted me to describe some of the important universal principles related to human development in terms that could be a) verified through research processes such as the Lac La Martre study, and b) articulated in language that could be accessible to a wide variety of developing peoples.

The Lac La Martre study was itself one aspect of a larger research process upon which this thesis is based. That process constituted a search for an understanding of how education might best promote human development, particularily among non-industrialized peoples. The full scope of that research process amounted to my attempting to foster educational activities intended to promote human development in native communities in Canada, and reflecting on those attempts. The intent was that a praxiologically generated understanding of the role of education in human development would emerge. Part Five of this thesis will detail some of those activities and the observations derived from them.

The action dimension of the praxis of education is, whether or not we are aware of it, always informed and shaped by some theoretical perspective. It became increasingly necessary, as this study progressed, for me to articulate clearly, for myself and for others I worked with, my own understanding of the various dimensions of the process of human development. My co-workers in native organizations demanded this of me, and my own aversion to shallow activism drove me toward it.

The mirror that I hold up to developing peoples which shows them the range of development possibilities must itself be a coherent one. Otherwise, I cannot, as Mao suggested, take what the people give in a confused and disorganized form, and give it back to them in a form that will serve as a guide for their own self-development.

What follows therefore, in this thesis, is a review of some of the key issues found in the thinking of the transformationalists, and a subsequent attempt to articulate vital principles of human development that I have discovered in the process of my own life and work.

Part Four: In Search of an Adequate Understanding Human Development and the Role of Education in that Process

I. The Transformationalist View of Human Development

Every knowledge enterprise, every research project, every development strategy, every conceptualization of curriculum and pedagogy--all are rooted in fundamental assumptions about the nature of human beings. These assumptions are entered into as one assumes the standpoint of one's culture: without critical consideration or intent. As A.N. Whitehead once remarked

> Our consciousness does not initiate our modes of functioning. We awake to find ourselves engaged in process, immersed in satisfactions and dissatisfactions, and actively modifying [the world]... (Whitehead 1967:46)

The shaping or modifying we undertake is itself an expression, to a great extent, of the world-shaping pattern that for us constitutes both the immanence of our cultural history and the teleology of the universe.

Alvin Toffler (1980) coined the term "indust-reality" to describe the reality system that I, as a stepchild of industrial culture, am immersed in. Immersion is indeed the operative word.

> Man lives in the moist air of earth like a fish in an ocean. He walks not so much on the earth (separated from it) as in the earth, textured into its rythyms, its vitalities, its laws. (Novak 1978: 26)

But as Joseph Chilton Pearce underscores for us in his example of the Balinese children who walk on fire, the mind-brain "knows" that certain laws are operable in a shared universe of meaning. We would like to say that there are observable, measurable, objective and immutable principles that govern the physical world. Of these we mean to gain knowledge so that we can control that world to our ever advancing advantage just as Francis Bacon had promised us.[1] But we are beginning to realize that such hopes are somewhat misplaced. Pearce writes of the firewalkers:

> At this point, our western logic breaks down before an irresolvable paradox. To us, you cannot have it both ways. You cannot dance on the coals without even a blister while beneath those coals pigs and pineapples or whatever are roasting. (Pearce 1980:185)

Fire, by definition, burns. That certainly is a principle that can be counted on, is it not?

> But add idea or abstraction and you add mind-brain. Add mind-brain to the world and you have, not reality as it is in the world, but reality as a construction, a created reality. Human reality experience and the world as it is are not synonymous phenomena, although they partake of the same substance. This is why the laws of one operation cannot possibly fit the other, why ordinary scientific testing, which is designed to discover the world's principles, is not appropriate for a study of earth plus mind. (Ibid)

The study of human cultures is necessarily a study of a phenomenon that is constituted in the relationship between earth and mind. In order for me to approach an adequate understanding of human development and how education can assist in that process, it is imperative at the very first that the assumptions lying at the root of the culture I myself dwell in concerning the nature and potential of human existence in the world be unearthed and examined. These assumptions will of course shape my interactions with people of other cultures.

The problem inherent in such an examination is that it must be conducted from some standpoint. "Precisely because different conceptual paradigms provide differing standards for evaluation" (Markley and Harman 1982:163) it is not possible to prove that one standpoint is ultimately better than the other. Yet as Kuhn suggested, when a pardigm of reality is no longer able to accommodate the frontiers of human knowing, a new paradigm eventually emerges which can incorporate both the known world, and the questions currently being raised about what lies beyond the frontiers of human theorizing (Kuhn 1962).

The most fundamental of paradigms, the paradigm of paradigms, is the image of human nature and purpose that is operative in the theories, policies and practices of any civilization.

In 1974 the Stanford Research Institute conducted a study at the request of the U.S. Office of Education that examined alternative images of the nature of man in relationshiip with the universe, how past images have led to the current crises in industrial culture, and "what types of images appear to be needed as we move into a post-industrial future".

That report was not generally published until 1983 (Markley and Harman 1983), yet its limited edition in 1974 became a classic in what may be called the literature of transformation, a growing body of writing dealing with the emerging global phenomenon of human transformation as a new image of the human condition.

What is fascinating about the Stanford study is its eclectic incorporation of a vast field of contemporary scholars and researchers, as well as the insights of many non-academic sources of wisdom ranging from the Bible and Sri Aurobindo to the American human potential movement.

What the study suggests is not that we should somehow adopt and promote a different image of man because it is preferable to some other image. Indeed, the authors refer us to the image makers of the German government prior to and during World War II who deliberately attempted to create, through rational manipulation, a particular image of man, and a myth of the emergent destiny of the German nation that ended in catastrophe. What Kinser and Kleinman (1969), authors of the provocative The Dream that was no more a Dream: A Search for Aesthetic Reality in Germany 1890-1945 make clear is that the dream came true. The myth (albeit artificially fabricated) shaped perceptions, which in turn produced policies that set into motion a dizzying chain of events. And somehow through it all, the image grew and took on life of its own, fed by events to which it was symbiotically linked, until it became impossible to tell which caused which--the myth the event or the event the myth.

The literature of transformation is suggesting something quite apart from the rational manipulation of the human psyche that has been the fetish of totalitarian hopefuls (through the agency of shamans, of prophets, oracles, etc.) since the dawning of human self-awareness. What is being observed (as opposed to promoted) is that human consciousness is evolving a new relationship with the universe.

As systems theorist Erich Jantch (1980) suggests in his The Self Organizing Universe, the basic unit of survival is not an entity, but a relationship between organisms and their environment.

The "evolutionary transformationalist" image of man (Markley and Harman 1983) is seen to be an emerging phenomenon of the collective human psyche. One way to understand what is being suggested here is to consider the development of the capacity to use language that is latent and hidden within the just-born human infant. Certainly no examination of the "wiring or the bellows or the plumbing"

(Vonnegut 1974:12) of a baby will reveal the hidden potential that is unfolding in that child to enter into the abstraction of language usage. The Persian prophet of the last century, Baha'u'llah, poses another example, that of the fruit that is hidden (in the form of potential) within the fruit tree. The tree, He explains, can be cut into a thousand pieces, and no trace of the fruit will be found. But in the proper season and given the necessary environmental conditions (sunshine, rain, the nutrients of the soil, etc.) the capacity of the tree to bear fruit will manifest itself, and there will appear, gradually, the buds, the blossoms, and eventually the luscious fruit in the fullness of its beauty (Baha'u'llah 1971:155).

What is being suggested by the evolutionary transformationalists is really an image of human beings in relationship to the universe that may be summarized as follows:

1. The human species is engaged in a perpetual process of emergent becoming.
2. This evolution is fundamentally a cultural and spiritual process, but is expressed simultaneously in many dimensions of human activity including the personal and psychological, social, economic, geopolitical, ethical, legal, technical, biological, ecological and philosophical-theoretical domains. Hence a wholistic approach to understanding human processes is indicated.
3. Human beings can be conscious participants in our own evolutionary process, and as such can help to direct the course of human development on this planet.
4. The emergent outcome of the human evolutionary

development process is the transformation of the relationship between human beings and the universe (see Pearce 1980:185-86) which is, in effect, the transformation of the "world".

5. The human evolutionary transformation process can only be understood in relation to the wholeness of the universal context of which humanity is a part. This context includes the ultimate unknowns underlying the ordering of the universe. Again, a wholistic perspective of human processes is indicated.

6. The ongoing process of human transformation necessarily subsumes and incorporates all previous human development (just as Thomas Aquinas pointed out that the number 5 does not preclude the numbers 1, 2, 3, and 4, but subsumes them) into current stages of the process, but that entirely new dimensions of human possibility, not pre-figured in previous stages, are constantly emerging.

II. "Indust-reality" and Human Development

An interesting conceptual dilemma presents itself when one considers that the evolutionary transformationalist world view emerged from the bosom of "indust-reality". How is it possible that successive waves of evolutionary transformationalist thinkers, researchers and scholars could be produced by a culture the dominant themes of which have been correctly classified as imperialistic, oppressive, technocratic, excessively rationalistic, individualistic, materialistic, hedonistic, anti-ecological, anti-developmental, ethically amoralistic, spiritless, and in a general state of collapse?

Pitrim Sorokin explains:

> Although the dominant pattern of modern culture in all of its components has been separate for the last four centuries, side by side with it there have existed, as minor currents, ideational and other forms of the fine arts, religion, philosophy, law, ethics and modes of living and thinking. Hardly any culture in the history of mankind has been totally and completely integrated. (Sorokin 1957:26)

The Hudson Institute group (Kahn and Wiener 1967) provided a useful summary table of Sorokin's classifications of systems of truth which underlie distinct cycles in the evolution of civilizations. To their synthesis of Sorokin's ideational, sensate and late sensate categories I have added the category which they removed for ideological reasons from Sorokin's taxonomy, and have adapted it to conform with the emerging paradigm of human development discussed above (the "evolutionary transformationalist" paradigm).

Table One: Systems of Truth

	Ideational	Sensate	Late Sensate	21st Century Integrated (Idealistic)
1.	revealed	empirical	cynical	empirical/ intuitive
2.	charismatic	pragmatic	disillusioned	visionary/ pragmatic
3.	certain	operational	nihilistic	relativistic certitude

4.	dogmatic	practical	chaotic	systematically open-minded
5.	mystic	worldly	blase	mystico-practical
6.	intuitive	scientific	transient	rational/ intuitive
7.	infallible	skeptical	superficial	ever-unfolding
8.	religious	tentative	weary	transformational/religious
9.	supersensory	fallible	sophistic	supersensory/ empirical
10.	unworldly	sensory	formalistic	praxiological
11.	salvational	materialistic	atheistic	evolutionary/ transformationalistic
12.	spiritual	mechanistic	trivial	spiritual/ material dialecticism
13.	absolute	relativistic	changeable	immanent and in process
14.	supranatural	agnostic	meaningless	infinitly inviting/ultimately unknown
15.	moral	instrumental	alienated	morally grounded, mutualistic/interventionistic
16.	emotional	empirically verifiable	expedient	open-hearted reasonableness
17.	mythic	logically verifiable	absolutely relativistic	mythico-empirical

(Modified and adapted from Sorokin 1957, 1962, 1964; Kahn and Wiener 1967; and Markley and Harman 1982)

The same culture that produced Homer, Socrates, Plato, and the tragedies owed the prosperity and leisure which permitted its indulgence in the aesthetic and the philosophic at least in part to the labor of human slaves. In another era, the same cultures that encouraged female infanticide and barbarous cycles of raids and revenge murders between rival family groups, later became (due to the civilizing influence of the Prophet Mohammed) the apex of human civilization on the planet for a significant period of history. At a time when London was still a muddy market town and England, not yet a nation state, was ruled by feuding warlords and corrupt priests; when the Christian religion had generally declined to become more a force for totalitarian rule than a means for human liberation and when the generality of the population lived in complete ignorance of any world other than its own, at that time in far away Karbila, Baghdad and Istanbul, European priests sat at the feet of Arabic scholars and were taught the classics of ancient Greece and Rome, and the principles of mathematics, astronomy, medicine, logic and nation building.[2]

As Fred Polak suggests, a "happy double coincidence" occurred with the development of printing in 1450 and the fall of Byzantium in 1453. When Byzantium fell, her scholars fled to Italy from the East "with an unbroken tradition of Byzantine-Hellentic contact. Once again a new world was laid before man: Hellas, Israel, and the ancient glory of Rome" (Polak 1973:86-87). And it was not only the elite few who could sit at the feet of scholars in centers of learning. Books carried the new vision to every corner of the European continent.

From this union of noble learning and hungry ignorance there sprang a renaissance of civilization in Europe. The Christian religion experienced a genuine revival. Centers of learning were established. The sons of the landed rich, and later of the emerging middle class were educated and the enlightenment dawned.

Nearly two hundred years later in 1642 (the year of Galileo's death), Isaac Newton was born. The last fingernail grip on the old order was slipping away just as the young Newton achieved a synthesis of the works of Kepler, Galileo, Bacon and Descartes.

But there were always undercurrents:

> ...always minor themes, reluctant or nominal conformers, undergrounds, holdouts, dropouts, dissenters, schismatics, heretics, unbelievers, and other deviants and exceptions. These may be a majority of the population, but still not very visible. (Kahn and Wiener 1967:41)

Long before Christianity ever appeared on the European continent, shamans had taught the mysteries of the Tree of Life, and there were ceremonies and healings much like those of North American native people.

With the gradual Christianization of Europe, these practices began to disappear, but the Tree could not be cut down, and so it was subsumed and decorated for other purposes.[3] From this strain of shamans, wizards, alchemists, white witches, astrologers, soothsayers, fools, bards, and mystics who were influenced by such diverse streams as neoplatonic cosmology, neopythagorean numerology, the Jewish Cabala, Islamic mysticism, natural philosophy, and European folk religion, there developed a complex underground movement to preserve the old teachings. Out of this movement arose the Tarot deck as we know it[4] and secret societies such as the Rosecrusians and later, the Theosophical Society. These groups kept alive the belief in what Huxley, and Leibniz before him, called the "perennial philosophy" (Huxley 1945) and the belief that the universe can never be "known", that there is always still more to learn; that the human spirit is drawn, as if by a magnet, into what Jung later was to term "the cloud of unknowing". Such metaphysical sentiment is hardly the soil in which an age of rationalism can take root, but despite the counterstrains, it did indeed take root. In every evolutionary developmental process, there exists a necessary tension between order and novelty; between the transformative and conservative forces which together propel the process that is life. When Pearce described human development in terms of a series of matrix shifts, he showed how the "intent", that is the necessary consequence and apparent purpose of bonding with one matrix, was to faciliate an eventual break with that matrix and an identification with a still more enabling one (Pearce 1980). Pearce was here echoing Hegel's doctrine of the dialectic which Marx later modified into a theory of social transformation: namely that the seeds of disintegration of the "pattern that connects" (cf Bateson 1979) any particular phase of social development are already germinating within a society at the earliest moments of that phase.[5] And so it was with what we are now calling "indust-reality".

As Sorokin (1957) pointed out during the period that witnessed the rise of what he calls "sensate culture" the best minds of the age applied themselves to the fields of science and technology. Contrast this to the rise of "ideational" cultures when the best minds are figures such as St. Augustine, St. Thomas Aquinas and other spiritual geniuses who can lead humanity to a new system of truth, ultimately religious at its core.

It is informative to attempt to view the future from the standpoint of fifteenth century Europe. It seemed as though a new day had surely dawned. The church and her scholars were no longer the "light of the world". Indeed the luminaries of spiritual leadership had for some time been darkened and the erudite stars of a bygone era had fallen "from the heaven"[6], much as Jesus had predicted. Questions concerning the position of the earth in the universe, and by implication the meaning of man in creation were now to be resolved through systematic observation and experimentation.

The feeling of exhilaration and excitement knew no bounds. There was nothing that could not be known, no problem that would not eventually be solved. In every field of endeavor, from the laboratory to the artist's garret, to the far flung shores of unknown continents, God's hidden secrets were about to be devulged. The rulership of the earth had been God's. Now it was to be man's.

A prisoner in the Tower of London just prior to the English revolution of 1640 wrote

> Man...is an absolute master of himself; his own safety and tranquillity by God...are made dependent on himself. And in that self-dependence, in the neglect of others; in the entire ruler and dominion of himself. The affections being composed, the actions so divided, is the perfection of our government, that summon bonum in philosophy, the bonum publicum in our policy, the true end and object of the Monarchy of Man. (in Christopher Hill and Edmund Dell 1969:93)

It is easy to see why the author of these words was confined to the Tower. But the forces unleashed by the revolution of ideas, introduced to England by Francis Bacon and others were far too profound to be locked away and forgotten.

In 1641 the British Parliament snatched the reigns of power from Charles I and a civil war followed that ripped apart the last vestiges of a social order. The fighting stopped briefly in 1644 with the great Royalist defeat at Marstan Moor but the trouble was far from over. Not until the trial and execution of Charles I in 1649 and the Proclamation of the Republic later that same year was it clear that the "Monarchy of Man" was destined to overturn the divine right of kings. Recall that the doctrine of the divine right of kings identified the monarch as the proxy of God. Only a few had been insightful enough to realize, long before 1649, that the world was being turned upside down by the new philosophy.

In 1611 John Donne wrote

> [The] new philosophy calls all in doubt;
> The element of fire is quite put out;
> The sun is lost, and the earth, and no
>   man's wit
> can well direct him where to look for it...
> Tis all in pieces, all coherence gone;
> All just supply, and all relation:
> Prince, subject, father, son, are thing
>   forgot,
> For every man alone thinks he hath got
> To be a Phoenix, and that then can be
> None of that kind of which he is, but he.
> (cited in Hill and Dell 1969:192)

Between the prisoner's letter and John Donne's poem reverberates the schizophrenic anguish of renaissance man: elated but uncertain, exhilaratingly free and reborn, but at the same time cut loose from God and all that is certain. This "renaissance man" we call the precursor of our own era. And perhaps he was.

Biologists such as P.B. Medowar and Theodosius Dobzhansky are telling us that we can literally direct the course of our own evolution.

> ...evolution need no longer be a destiny imposed from without; it may be conceivably controlled by man, in accordance with his wisdom and his values. (Dobzhansky 1962:346-7)

The biogeneticists are telling us that it will soon be "child's play" to change a subject's sex, color of hair or eyes, and general anatomical features through genetic surgery at conception in a test tube.

Brain biologist James Bonner predicts that "man will have the opportunity to literally remake himself in whatever image he chooses" (cited in Matson 1976:99). Thus far has the dream of Francis Bacon come. But which image will we choose? We have seen the catastrophic results of the German imagemaking enterprise that led to Hitler's Germany (Kinser and Kleinmann 1969).

The elation of renaissance man was not unfounded. But neither was his uncertainty.

> During the centuries of its domination sensate cultures progressed unprecedentedly in science, technology, economics and politics; and it created a vast treasury of the magnificent masterpieces of sensate music, painting, sculpture, literature and drama. However, at the end of nineteenth century this creative culture began to show the symptom of fatigue and disintegration. (Sorokin 1964:23)

A cursory reflection on the progress of western civilization, especially after the industrial revolution, will reveal that it has been more successful than any civilization known to us in meeting the basic survival needs of people. Unfortunately, the survival and well-being of some people has been enhanced at the expense of the survival and well-being of many others. Large portions of humanity have not, and never will be able to replicate the conditions which made it possible for the Atlantic community of nations to develop as they have.[7]

Fully two-thirds of humanity are not now able to live at the standard of living enjoyed by the industrialized countries. Nevertheless, nearly everybody would like to be able to do so. And nations will go to precarious lengths in the name of "progress".

Aurelio Peccei, past president of the Club of Rome, wrote:

> Conceived as the acme of human enterprise, progress has the mission of procuring ever more information and knowledge and ever more goods and equipment for the Earth's growing billions, so that they may have material wealth and power with which to tame Nature and to better their existence. Every human group has interpreted this as a mandate to seek as much of this progress as it can for its own good, not disdaining to outdo other human groups in the process.
>
> For quite a while, humanity thought that in this way it had discovered an optimal pattern of steady, self-propelling development. We were all proud of a civilization highlighted by unprecedented scientific achievement, wonderful

> technology and a flood of mass-production which brought in their stride higher standards of life, the conquest of disease, undreamed-of travel opportunities and instant audiovisual communications.
>
> But it eventually began to dawn on us that by the indiscriminate adoption of this pattern we were all too often paying exorbitant social or ecological costs for improvements obtained, and were even induced to neglect the virtues and values which are the foundations of a healthy society and at the same time the very salt for the quality of life. Then came the creeping doubt that for all its greatness humanity lacked wisdom. (in Botkin et al 1979:xiv)

It is precisely "wisdom" that was abandoned as the ultimate authority in matters of truth. And now we feel that we must bear the existentialist burden of doubt upon our shoulders; that we must face the darkened horizon of the future alone, choose, and wait upon the consequences. Not only is this the burden of existentialist man. It is also the only path known to techno-scientific man. And it is precisely this cultural evolutionary cul-de-sac that is transcended by the emerging transformationalist paradigm in the human sciences. As we have learned from Hegel and Marxand later from Sorokin (1957) and Prigogine (1984) there are always conflicting strains within any culture that push and pull upon the image of man and the ideals at the base of that culture.

What Toffler recognized when he coined the phrase "indust-reality" was that a global cultural transformation is taking place: that we are moving out of a reality system that developed, in its final form, through the processes of industrialization, and that a new paradigm of reality is emerging which he called the "third wave" (Toffler 1980).

Though it may seem that such revolutions burst upon a surprised and unsuspecting world, a careful ethno-historical analysis always reveals an incremental and almost (though never quite) predictable process. The dominant pattern of our culture which Sorokin labels "sensate" has been in the later periods of its fossilization and decline, increasingly dehumanizing, oppressive, and imperialistic. It is vital that developing human beings learn to sort out their legitimate desire for material well-being from the culturally induced, soul paralyzing image of man which derives from a dying culture system that is, in its declining stages, fundamentally anti-developmental.

What follows is a summary of some of the major assumptions about human beings and our relationship to the universe that either derive directly from "indust-reality", or were borrowed by it to serve certain instrumental or ideological interests. Each of these ideas have borne bitter fruit for developing human beings. It will be clear that these propositions do not all agree with one another, and yet the bulk of policies and practices in education and development arising out of our culture are rooted in one or more of these assumptions.

A chicken-and-egg argument may arise as to which came first, the cultural patterns and underlying assumptions, or the policies and practices. Anthony Wallace adds an interesting dimension to the conversation. In discussing problems produced by major societal paradigm shifts he says

> The problems produced by paradigmatic development are real ones and the policies which political and economic communities concoct to deal with them are an interesting field for cultural analysis, for experimental procedures tend to become policy and, when successful, to harden into conventional practice--ad hoc procedure becomes policy and policy becomes culture. (Wallace 1972:470)

It doesn't really matter whether we actually subscribe to a certain image of man before we act. If we act "as if" we subscribe to a certain image, we have entered into its reality and in effect, we become the image.

Here then are seven assumptions about the nature and purpose of human existence that have undermined human development processes all over the world:

1. Human beings are "masters and possessors of nature" (Descartes)

The "empire of man over things" (Bacon) set the tone for such ecological atrocities as acid rain, the dumping or "safe storage" of nuclear and toxic chemical wastes, strip mining, the large scale commercial farming practices which are rapidly depleting soil resources, and vast deforestation projects leading to the greenhouse effect and unprecedented soil erosion.

2. Man is a machine (Newton)

Indeed all of nature is a machine. Human beings may be somewhat clever machines, but our optimum operational capacity can best be monitored and maintained through careful attention to our consumption and production patterns. Human purpose is to be found in meeting maintenance needs (food, clothing, shelter, health care) and in contributing to a production process. Any defect in man can be repaired through instrumental manipulation of components of the human bio-machine, or the human social and cultural machine.

This thinking has led to a reduction of human labor to a "factor" in the production equation and increasingly inhumane systems for organizing and maintaining the mechanical efficiency of human workers. Karl Marx was one of the first to see the link between the alienation of human beings from the fruits of their labor (by paying them wages, the value of which in no way approximates the worth of the product produced) was really an alienation of human beings from their own development. Marx understood that transforming the world through creative work is one of the most important means by which man transforms himself.

The mechanical model of man has had devastating consequences in every field of human endeavor. Most noticeable of these have been the fields of medicine, psychology, education, economics, politics and social planning. When human beings are reduced to component parts--one for the school, one for the hospital, one for the church, one for the tax man, one for the wife or husband, and one for the retail distributors--a fragmented cultural pattern emerges that can never be consolidated to propel a self-directed development process.

Transformation, then, is out of the question. Machines stay as they are. They fit into a system of other machines to serve purposes unknown to them. Machines do not direct their own operations. They are owned and operated. Machine thinking is framed by owner/operator interests and definitions. Machines are made by operators to fit into a world over which they have no control. The servility of man to other men, anti-participationalism, oppression, mass-manipulation, and totalitarianism are the social step children of the man as machine image.

If we see ourselves as production-consumption machines, then the non-physical dimensions of our being tend to be ignored and we are only now re-discovering that to ignore man's inner nature is an exceedingly dangerous thing to do.

3. Man is an economic being

The rise of entrepreneurial and industrial capitalism forced a focus on individualism, rationalism, and materialism. There even emerged a subset of Christian theology (the doctrine of the elect) which suggested divine endorsement for economic man.

Modernization theory is a systematized rationalization for enterprises based conceptually on the image of "homus economicus". The promotion of individual entrepreneurship and materialism is equated with the promotion of human development. That these bacterial introductions into non-industrialized cultures tend to destroy previous cultural forms (Toynbee 1953) is seen to be inevitable and ultimately desirable.

The myopic focus on economic development to the exclusion of the cultural, spiritual, social, political and personal dimensions of human development introduce severe imbalances, disruptions and disintegration into human social systems. Indeed, any imbalanced non-integrative approach to human development is problematic and indeed, harmful.

4. Human beings are animals

The distinction, upheld in western civilization for centuries, between human beings and the animal kingdom (see Lovejoy 1936) was challenged by ideas coming out of Freud's work on instinct and the subconscious, by post-Darwinian theories of evolution, and more recently by socio-biology (see E.O. Wilson 1975). All of these currents of thought placed human beings in the world of nature. Subsequently there arose theories of impulsive, irrational man, moved by instincts beyond his control to be aggressive, and therefore in need of containment or regulation (Ardrey 1966, Lorenz 1967). As well there arose the promoters of "planned man" (Nash 1968) who came to believe that through proper stimulus-response "training" whole societies could be guided to sanity and well-being (Skinner 1948, 1955). There have been large scale social experiments influenced by Pavlovian-Skinnerian behaviorism in the Soviet Union.

Behavior modification theories have played a major role in the "diffusion" of modernization. The problem of inducing a "target population" to adopt certain innovations of mind, heart, or social and economic practices has been approached as a basic stimulus-response problem (See Rogers and Schumacher 1971 and McLellan 1961). Certainly some peoples will be considered more bestial than others. The obvious totalitarian implications of this understanding of human nature needs no elaboration. Whole populations have been subjected to mass manipulation leading to catastrophes such as Hitler's Germany or more recently Jonestown, Guyana.[8]

The image of man as beast has contributed to a moral decay that is fast approaching neo-hedonism in the major cities of the world. If man is an animal, a person is well advised to live for today, take what he or she can get, and by "tooth and claw", seek for dominance in the jungle of the world.

The "survival of the fittest" easily translated to an ideology of dominance sometimes referred to as social Darwinism. The idea of rightful dominance of one group or race over another arising out of Darwinian evolutionary theory was widely diffused in France through the works of Count Gobineau (1853) and in England and Germany through the eloquent, if not scientific, writing of Housten Stewart Chamberlain (1899).[9]

We see these ideas blatantly enshrined in law in South Africa, and functionally operative in the neo-colonial domination patterns of scores of third world countries.

In the promotion of human development, the image of man as a beast can lead to paternalistic manipulation of other people's cultural patterns, a denial to the subjects of development of participation and control of their own development process, and the totalitarian elitism rooted in a belief in the inherent superiority of one group over the other.

5. Human beings are essentially separate from one another

Joseph Royce coined the term "encapsulated man" to speak about the tendency to think and act as isolated human units without reference to the wholistic context of our lives (Royce 1964). The denial that I am "my brother's keeper", as well as the encouragement of refusal to assume responsibilities for our actions as they may effect other peoples or even future generations has served the interests of a complex economic system requiring mobile, disconnected human units standing ready to assume a variety of roles in a complex interconnected production system.

The consequence of this single idea for native people such as the Dene has been devastating. When teams of hunters who shared their catch with each other and all who depended on them were replaced by the individual trapper who earned a private income with which he could purchase his own collection of goods, a major paradigmatic innovation was introduced into native societies (Asch 1974, 1976, 1977). Because there was a group standing ready to profit from this cultural innovation (the fur trade cartel) it was immediately exploited and encouraged through a reward system. But for the Dene, individuation proved to be a Pandora's box with countless consequences affecting many generations.[10]

Human development, when considered wholistically, is both an individual and a collective process. Uprooting individuals from the social context of their lives in order to train them for "development" (the traditional schooling approach) is ultimately anti-developmental. A society of "encapsulated" human beings is lost in a search for meaning

(Frankl 1969), is disintegrated to its very core (in families and basic institutions) and is bereft of an integrating, guiding image of the future (Polak 1973) without which no society can develop.

The individualistic image of man has been extrapolated to the level of nation states, and a planetary political crisis with the potential to destroy all life on earth as we know it is a direct consequence of the resulting autonomous nationalism.

Human development cannot occur in isolated pockets, especially at the expense of other human groups. The fact of our interconnectedness dictates a collaboration imperative and an end to "encapsulated man".

6. Human beings are fundamentally rational beings

We have only to turn to the classical view of science for a list of axioms concerning human rationality:

- Reason is the supreme tool of human kind.
- Knowledge, acquired through the use of reason, will free mankind from ignorance and will lead to a better future.
- The universe is inherently orderly and physical.
- This order can be discovered by science and objectively expressed.
- Only science deals in empirically verifiable truth.
- Observation and experimentation are the only valid means of discovering

> scientific truth, which is always
> independent of the observer.
> (Conant, cited in Markley and Willis
> 1983)

There is no reason to deny the usefulness of scientific investigation. But the axioms listed above have led us onto perilously thin ice in terms of our survival as a species. We have come to believe that man and the universe are finite, knowable and controllable through the rigorous application of the scientific method. We also believe that any problems which may have or will arise in the wake of the modernization process (such as biospheric poisoning, mass starvation, or international political terrorism) can be solved through the inquiries of science and the application of new technologies. In this respect we have believed in vain. When the principles of an objective science are applied to inquiries into the inter-subjective world of human beings, a great deal that is human is inaccessible to systemic investigation.

The reductionistic approach of classical science was adequate for the investigation of isolated segments of reality, but human beings in relationship to the universe synergetically generate a class of phenomenon that is irreducible. And it is with the phenomena of human beings interacting with the universe that the science of human development must concern itself.

The rational faculty may be thought of as a subset of human intellectual capacity, which also includes memory, intuition, speculation, and imagination. As it dawns on us that we are participating in the process of our own evolution, and as we assume conscious responsibility for that participation, it becomes increasingly important to access every possible way of knowing about human reality and human potential that is available to us.

A rational-empirical epistemology can at its best only access what has been human, but never the could be, never the possibilities that lie before us. Yet we are advised, even by a humanist scholar of the stature of Erich Fromm, to look over our shoulders with the eyes of science.

> If we want to know what it means to be human, we must be prepared to find answers not in terms of different human possibilities, but in terms of the very conditions of human existence from which all these possibilities spring. These conditions can be recognized as a result not of metaphysical speculation but of the examination of the data of anthropology, history, child psychology, individual and social psychopathology. (Fromm 1968:61)

McLuhan and Fiore suggest that industrial civilization is like a giant runaway vehicle, the chauffeur of which is attempting to negotiate hairpin curves on a treacherous, unpredictable route by driving with his whole attention fixated on the rearview mirror (McLuhan and Fiore 1968:18). Is this not what we do if we insist on looking exclusively to what man has been and to what he has done in the past for guidance about how to negotiate the future?

There is a serious problem with Erik Fromm's argument when considered in terms of the phenomenon of human development. In denying us what he calls "metaphysical speculation", he condemns us to a future that is little more than a mirror of our past. This leads to the rationalization "you can't change human nature", which is manifestly untrue. Man is not merely what he has been or even what he is now, he is also in a process of perpetual becoming.

Also the notion that human beings are fundamentally rational does not account for the clearly irrational, or supra-rational aspects of human behavior as revealed in consciousness research.

This body of research covers such diverse, but related areas of interest as dreaming, altered states of consciousness, biofeedback, meditation, psychedelic drugs, out of body experiences, near death experiences, transpersonal psychology, extrasensory perception, hypnosis, suggestion, and mass visualization.

Within the framework of indust-reality, it is the rational technocrat, the professional, the benevolent expert; with whom rests the task of shaping the world of the human mass. The suggestion that developing subjects have the competence to manage their own development process seems an absurd violation of the natural order. Indeed, the rule of rational man over the nonliterate masses of the world may rightly be thought of as yet another disguise of the social Darwinists, who quite rationally argue that those most fit to rule should rule.

7. Human beings are material beings; therefore human happiness arises out of materialism which is a natural human trait. To have is to be.

Denis Goulet writes eloquently of the ontological relationship between having and being:

> ...when man 'has' things, he 'is' more than he was before. 'To have' helps him to 'be'. So true is this that unless man 'has' minimum goods he ceases to 'be' altogether. Even when he has enough to be, he feels stunted in his being until he has more.
>
> 'To have' in the ontological sense, is not to own in economic or judicial terms, but to assimilate for vital inner purposes. (Goulet 1977:129)

It is clear that one needs to "have" air, food, water, clothing, shelter, friends, community, security, meaning, and purpose, but having these things is not at all the same as owning them. It rather implies having a relationship with them, a symbiotic relationship within which one is nurtured and is able to grow. The crass acquisitiveness equated in indust-reality with the worth and well-being of persons is the prostitution of that ontologically symbiotic relationship.

Native people in Canada who were induced to give up their relationship to the land for money, and promises of security have suffered a cultural sickness that has nearly destroyed them. Now they "have". They have free houses, free food, free health care, and a work-free life. They also have a constellation of social pathologies which include the highest suicide rate in Canada, eighty to ninety-seven percent school dropout rates, severe alcohol and drug abuse, rampant family breakdown, interpersonal violence, a cultural-spiritual malaise and despair.

A correlate of the progress principle (see Botkin et al 1970) which promotes the notion that having more and more makes human beings happier, more secure and somehow better is the notion that unrestricted freedom is a basic right of the affluent. The more one has, the more power one has to do whatever one wants.

This in fact seems to be true. Now, a tiny affluent minority of human beings possess the power, through political and trans-national corporate connections to sentence millions of people to a death by starvation (agro-business price control) or to even start a nuclear war with the capability of wiping out all life in our ecosystem.

To their way of thinking, these individuals have obtained a measure of security and well-being that is directly linked to their affluence--to the fact that they have more than others. Erich Fromm writes about the radical hedonism practiced by the rich throughout all ages which a) sought personal happiness at all costs--happiness defined as the "satisfaction of any desire or subjective need a person may feel" (Fromm 1981:xxv), the concomitants of which were b) egotism, selfishness and greed which are believed to lead to that happiness.

As a doctrine for development, the materialistic progress principle has proven to lead to the underdevelopment of masses of people on every continent of the globe, an underdevelopment that is not only material in character, but cultural, political, personal and spiritual as well. The seductive pseudo-doctrine of development as material progress which derives from the image of man as a producer-consumer and a belief that to "have is to be" (Fromm 1981) presents to developing humanity the ultimate conceit of indust-reality. It is a seduction to which many have succumbed, and have come away feeling cheated, empty, and confused for having been

> induced to neglect the virtues and values which are the foundations of a healthy society and at the same time the very salt for the quality of life. (Pecci, in Botkin et al 1979:xiv)

III. The Role of an Image of Human Beings in Human Transformation

Following Joseph Campbell's studies of mythology and past civilizations (1956, 1968), the Stanford group identified seven functions that an image of man plays. Their work may be summarized as follows:

1. The mystical function - inspires a sense of the meaning of the universe and of man's existence in

it. Ultimate questions are answered experientally by entering into the vision, or image, of a new reality.

2. The cosmological function - forms and presents images of the universe in accord with local knowledge and experience.

3. The sociological function - validates, supports and enforces the local social order, representing that order as being in accord with ultimate reality.

4. The pedagogical or psychological function - guides each member of a culture through the various stages of life, teaching ways of understanding oneself and others.

5. The editorial function - the myths and images of a culture define certain aspects of reality as "real" and define others out of existence, and hence not "seen" by cultural insiders.

6. The political function - the myth or image is deliberately employed to represent the claim to privilege or authority of some special person, race, social class, nation or civilization.

7. The magical function - is the image or myth as correlated with rituals, prayers or other practices to derive some special benefit such as a good hunt,rain, or the winning of a political contest or a war. (Markley and Harman 1983:7-8)

When considering the images of man that I have suggested are dominant in our industrial reality system, one could argue that the average person in our society does not hold these images in view, and, in fact, is not greatly influenced by them at all. Few people would, after all, overtly subscribe to the theory that they are nothing but a bundle of instincts (man as beast) or a complex machine (man as mechanism). But people do behave as though they believed in these images, and even if all that we were talking about was a heuristic device, a kind of large metaphor to describe social patterns, there would be ample justification for proceeding as I have, by placing a great deal of emphasis on the importance of the image of man in the process of human development.

I have spoken of human development as a process of transforming the relationship between mind and the universe --that "world" which is culture and context for our lives. I have suggested, following those who followed Marx, that one important aspect in this process is creative work; acting upon the material world to change it, and I have tried to show that such action is fundamentally dialectic in nature in that both the world and the one acting upon it are thereby transformed.

But to deliberately act upon the world for the purpose of nurturing the unfolding of human potential requires of us both the intelligent engagement of our human will and a vision of possibility that draws us like a magnet into the work, and hence, into the future. For example, in reflecting on the art of classical Greece, with self-perfected man as the summum bonum of the future, one can imagine a perfectly formed Appollo-like figure rising out of a block of granite, his muscular shoulders bent over hammer and chisel as he sculpts himself out of raw rock.

The entire history of western civilization can be traced, as Polak (1973) brilliantly traced it, by examining the image of the future which pulsed at the heart of every age. Yet when we arrive at the present era this approach fails, although not because of any inherent flaw in the methodology itself. Rather we are an age which possesses no coherent image of the future. For us there is no future: there is whiteout, nuclear winter; dark, silent unknown nothingness.

In order to come to any understanding of the role that an image of human beings, of our possibility and of the future, plays in the unfolding process that is human development, it has been necessary for me to hold the paradox of a) enduring reality b) in eternal flux in tension and balance in my consciousness.

In a static dimension of the reality of men and women it can be said that we are material beings, animals, and even in a sense, mechanisms. We are all of these and more. We are also tool makers (homo faber) or simply makers (homo economicus). We are also most certainly rational beings, but there is still more. Always there is more. Any static label pinned as a "final" epitaph on the reality of human beings has led to an imbalance in human systems precisely because the wholeness of our humanity cannot be contained by any single concept--especially one that objectifies living, breathing, knowing subjects.

To express this philosophical insight, North American plains Indian tribes employed the symbol of the medicine wheel.

IV. Meditations on the Medicine Wheel

The ancient symbol of the medicine wheel is found, in some form, in the graphic art of nearly every indigenous tribe in North and South America.

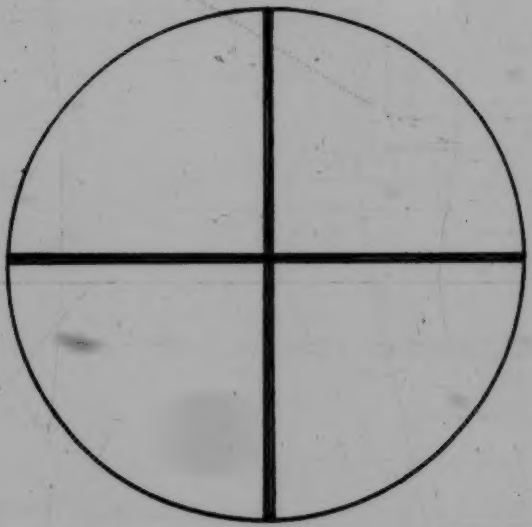


Figure 4: The
Medicine Wheel

It is used as a metaphor to reflect the various dimensions of human processes and their relationship with each other. I am greatly indebted to the wise native elders and teachers from the many nations and tribes who have contributed to the development of this rich and powerful philosophical tool. Yet I must also stress that my reflections upon the medicine wheel arise out of my own deep and personal relationship with that ancient symbol.[11] In no way do I wish to present the following views of men and women as being those of wise tribal elders, and therefore somehow legitimate.

What follows are my reflections upon the human condition as seen from my own standpoint in the twentieth century, reflections enhanced by gazing into the archtypal mirror of human possibility that is the medicine wheel.

The wheel is first and primarily a circle.

Figure 5: The Circle

There is an inside and an outside to the circle. Even though we may attempt to describe universals or the universe through the use of some metaphoric inscription, still, we have merely inscribed a circle on a flat plane. There is always more, just outside the circle of our inscription, that cannot be accounted for by any analytical thought system, any explanation, or any description. Perhaps Descartes' universe is finite and knowable. Mine is not. Neither was P.D. Ouspensky's (see A New Model of the

Universe, 1971, written in 1931) or Albert Einstein's (discovered in roughly 1905).

The implications of this one idea are enormous: that there is always more beyond what is now known or constituted as human possibility; that outside all life systems which we understand there are whole systems we do not understand; that these systems are infinitely self-generating so that we will never comprehend them, never be able to surround them with our intelligence; and that what is beyond us in terms of human possibility draws us, like a giant invisible magnet into the vortex of the future. It is wise to be humble before the stars.

The hermeneutic phenomenologist Hans Georg Gadamer writes of the nature of true questioning:

> In order to be able to ask, one must want to know... To ask a question means to bring into the open. The openness of what is in question consists in the fact that the answer is not settled. (Gadamer 1975:326)

It is with the openness of true questioning that we must approach the problem of human development. For in posing such a question we are engaging in conversation with the universe. This conversation is no mere parlor activity. It is that relationship between mind and the universe which constitutes the human life world. Gadamer states that

> To conduct a conversation means to allow oneself to be conducted by the object to which the partners in conversation are directed. (Gadamer 1975:338)

That "object" is the life world. It is the medium through which the conversation occurs. Hence, to ask about the nature of the human development process and of development promoting education is, at its primary level, to be engaged in a conversation with the universe. In such a condition of openness, it is inevitable that the questioner will be affected and changed as the life world is transformed. It is therefore fundamental that educators understand that what it means to join partners with developing subjects in a process of human development is precisely that. There is no way to remain outside of the process, and to promote and nurture the process at the same time. As novelist Tom Wolfe put into the mouth of his spaced-out bus driver in The Kool-Aid Acid Test, "The bus is leaving. You're either on the bus or off the bus."

Native American tribes see completeness in sets of four.[12] There are four cardinal directions (not counting earth and sky).

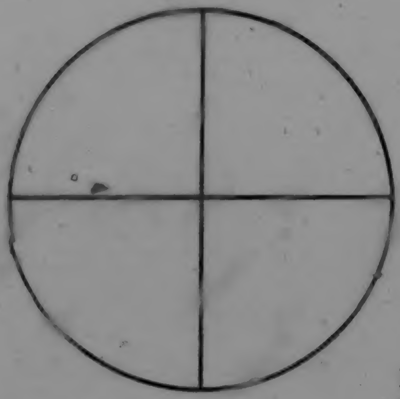


Figure 6: The Four Cardinal Directions

Each of these directions on the medicine wheel may be used to symbolize qualities or aspects of human nature.

The points on the wheel may, at different times, be used to explain the relatedness of a wide variety of essential sets of four: the four symbolic races of man (red, yellow, black and white), the four worlds of existence (mineral, vegetable, animal, and human worlds, all bound in the unity of spirit), the four environments with which human beings must interact (the physical environment, the human environment, the self and the unknown), the four dimensions of human potentiality (the physical, emotional, mental and spiritual dimensions, all converging at the intersection within us known as volition), the four dimensions of human knowing (action, reflection, interpretation and understading mediated at the intersection of these activities by the world-shaping power of belief and vision).

There are, of course, many more sets of four that fit within this analytical framework that I have not named, and indeed, many which remain to be discovered.

In all cases the establishment of a set of four is a metaphorical device, and not an empirical statement. It is intended to show that the aspects of any particular set of four are related to one another in the context of a wholeness. For example, one set expresses the relationship between the physical, spiritual, affective and cognitive domains of human potential.

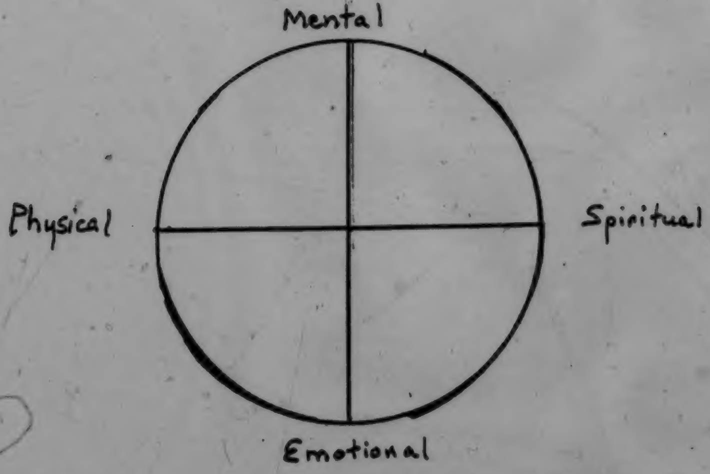


Figure 7: The Four Domains of Human Potential

Not only am I immediately forced to consider the whole person developing in all of these four domains simultaneously (or a people developing in these four domains), but I am forced to recognize the role of volition, the will, which translates on the level of community to the dimension of participation. As well I am forced to conceptualize the dialectical relationship between the various aspects. So, in the example above, there is a polar connectedness between the physical and spiritual domains of human existence. It is clear that the wheel will not turn unless these are in balance.

Jose Arguelles bases a powerful analysis of the role of vision in the process of human transformation on this one dialectic, which he terms the psyche and the techne.

> ...human history and culture may be viewed as the attempt to achieve a dynamic integration of a motivating set of polar but complementary archtypes... On the one hand the feminine archtype of the giver-receiver,...and on the other the masculine archtype of the power-acquiring shaman/technocrat/artist... The feminine archtype is psyche, the inherent capacity to know or to realize, the masculine archtype is techne, the innate ability to achieve or to put into practice. To the former belong the qualities of mind, intuition, and spirit; to the later body, intellect and matter... (Arguelles 1975:6)

When psyche and techne are out of balance, things fall apart. Arguelles, always the sensitive aesthetic, points us to W.B. Yeats' poem The Second Coming, written shortly after the holocaust of World War I.

> Turning and turning in the widening gyre
> The falcon cannot hear the falconner;
> Things fall apart; the center cannot hold;
> Mere anarchy is loosed upon the world,
> The blood dimmed tide is loosed, and everywhere
> The ceremony of innocence is drowned,
> The best lack all conviction, while the worst
> Are full of passionate intensity.
> Surely some revelation is at hand
> Surely the Second Coming is at hand.
> (Yeats 1962:91)

The role of the visionary, in the garb of avatar, poet, or artist, is to plant the seed of an integrating vision into the minds and hearts of human beings.

Describing symbols as "compressed information", Arguelles speaks of an emerging symbolic vision, powerfully integrative in its capacity to bring together the estranged forces of techne and psyche.

> Because the language of the new vision is symbolic, it is capable of conveying

> immediately through simple forms a multiplicity of meaning; because it is androgynous, it evokes the marriage of heaven and hell, the physical and the psychic, man and woman, the archaic and the evolving, the terrestrial and the celestial, the sacred and the profane. (Arguelles 1975:287)

Indeed for me, as for many native people, the medicine wheel is becoming such a symbol. It is not a dredged up artifact of a romanticized, de-historical past. It is a living pulsing expression of an ever-deepening insight into the nature of the relationship between human minds and the universe. It will serve as a grounding device in the discussion to follow on the process of human development. Such a device, whether in the form of a metaphor, or as concrete examples from the life world, is, I believe, essential to the process of reflection upon the phenomenon of human development.

It is so tempting to try to say what development "is"; to try to pen the final description so that at last we may "know" what it is we are promoting and so get on with the business at hand. But "development" defies objectification, as does all of life in process. Development is not a "thing" that, once named, can be boxed up and put under glass for display. What development "is" cannot be meaningfully uprooted from concrete human processes, and human processes never stand still. I don't think there could be any such thing as "development" all by itself any more than there could be love without lovers.

Human development therefore becomes a peculiarly ethereal enterprise to reflect upon in the abstract. Like cotton candy in the mouth, it melts away to nothing as soon as one attempts to grasp at its essence. I soon discover that I am floating like a helium balloon in uncharted skies, with no sense of which way the ground is.

The symbolic power of the medicine wheel, and other images have enabled me to hold in conscious focus a great many dialectically mated aspects of human existence while at the same time visualizing each of these aspects in their own unique subprocess of transformation within the integrated wholeness of human becoming.

Consider again the image of the medicine wheel. If human beings may be said to have capacities in the cognitive (or mental), affective (or emotional), physical and spiritual domains, and that these are coordinated in the center of the "wheel of life" by a knowing subject's active volitionary powers, we then have a conceptual tool capable of integrating various domains of human potentiality. While this is certainly an improvement upon the divide and conquer legacy of Descartes and Bacon, it is still basically a two-dimensional representation of static aspects of a static human nature. It has not accounted for the process dimension.

Indeed, the linear sequential nature of the subject-object thought processes inherent in cultures which have stressed techne at the expense of psyche as have European cultures since the "renaissance", tend to conceptualize the life world as a series of still photographs moving in rapid enough sucession to give the "impression" of process. From this standpoint the static image is the reality, and process the illusion. Theoretically we say all is in motion, but of course common sense and life experience tell us this is not really the case except in the rarefied atmosphere of theoretical physics.

So powerful is this way of seeing that it imposes itself on the life world even in our most diligent efforts to"see" the world "as it really is". A clear cut example of this may be found in the proliferation of stage theories of development that have crept into such diverse research areas as biology (especially embryology and genetics), astronomy, geology, palaeontology, sociology and psychology. We may indeed take a stop action photograph of the process of human embroyo development at various times during the in-utero development of a human infant. We may even label each of the stop action photographs we take as being a certain "stage" in the development process. When first level biology students study the "stages" of human embryo development they dutifully memorize the names and salient characteristics of these "stages".

It is all too easy to speak of human "development" or "evolution", which are metaphorical terms borrowed from the science of biology, without realizing the subtle paradigmatic distortions such a use of metaphors can exert on our thinking about human transformation. Classical evolutionary theory, which sees organic development in "stages", and the species-wide phenomenon of evolution as a random selection process, have their roots in the mechanistic view of the universe synthesized by Newton. So powerful has the influence of that paradigm of reality been that it caused biologists to "see" mechanical interactions as they studied life forms.

A social science that borrows these mechanized metaphors and applies them to human beings would surely be distorting human processes, unless it is made clear that the biological definitions of terms are themselves problematic, even for the science of biology. It is therefore (I feel) not the metaphors that need to change, but our understanding of what they mean.[13]

The in utero development of a human embryo is by no means a jerky stage-to-stage affair. On the contrary, the transformation of potentiality into actuality is a continuous uninterrupted process. There may be periods of apparent inactivity or extremely dramatic moments in that process well worthy of our notice. But the reduction of the process to "stages", whether in cell biology or in the study of history, tends to distort a fundamental paradox of existence, so elegantly explored by A.N. Whitehead: the search for permanence in the river of flux that is life.

The medicine wheel metaphor is capable of organizing both the parts and whole dialectic and the essential tension between permanence and flux into a single image.

For imagine the wheel turning, and as it turns it recedes toward a horizon point, cycle upon cycle of transformation, moving into an ever-emerging vision of possibility. Such a conceptualization might be represented by a helix-like figure proceeding into infinity. (See figure on following page.)

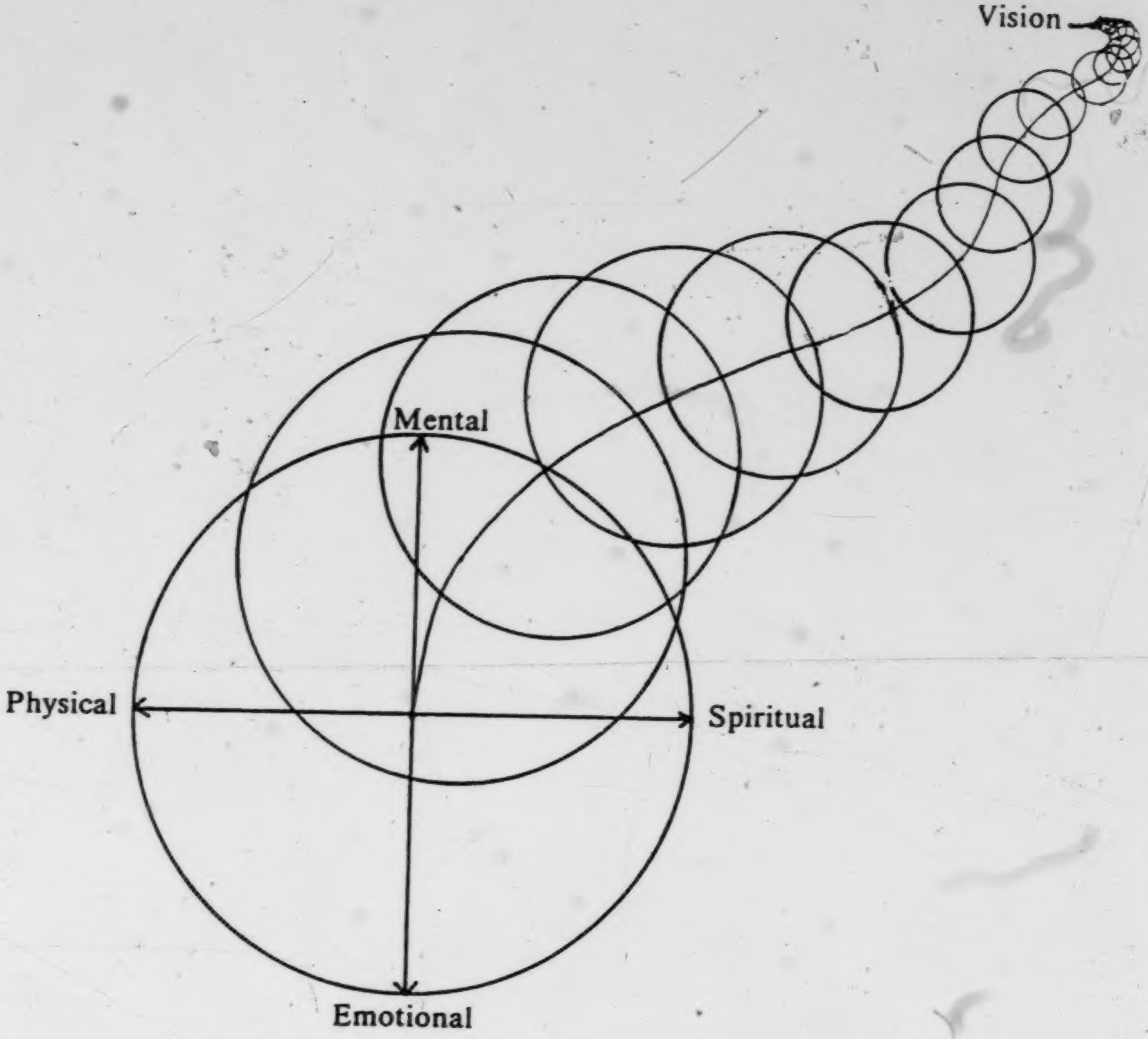
At the center of the wheel stands the self and around it is the will, the agency through which the self acts upon the world, and hence, upon itself.

Humanistic psychologist Roberto Assagioli derived much the same sort of conceptualization in his reflection upon the process of human becoming (Assagioli 1979). And indeed Assagioli's thoughts seem to be echoing a teaching that is as perennial as the perennial philosophy itself (Huxley 1945).

Consider, for example, the role of the "Word of God" in the exercise of God's creative power as described by the author of the Gospel of St. John:

> In the beginning was the Word, and the Word was with God, and the Word was God. He was, in the beginning with God; all things were made through Him, and without Him was not anything made that was made. (John 1:1-3)

Figure 8: The Process of Transformation


Vision
Mental
Physical
Spiritual
Emotional

The gospel writer cannot clearly distinguish between the self of God and the "Word" which we may here equate with the active will of God. Each is known to us because of the other.

V. Transformation

The theoretical problem of how the seemingly static interactive domains of human potential become actualized begins to open to us. In the center of the process is human volition; the active knowing subject deciding. But deciding what?

Recall again Pearce's example of the Balinese firewalkers. This time let firewalking become a metaphor for as yet unrealized human potential. See children, women, and men walking barefoot on coals so hot that it hurts to look at them; a pit some seven meters in length filled with burning coals and roasting pig flesh. Visualize as you read, soft warm tropical ink of night billowing around the firepit. Village women remove their sandals and step lightly onto the fire. Their walk is stylized and rhythmical. Soon they are followed by little children. At certain times the firewalkers pick up burning coals like scooped handfuls of water and pour them over both their hair and upper bodies. What could be more impossible? What could be more natural? The dancers return to their community unscathed. Roasted pig flesh and pineapples are removed from the firepit and the feast begins. Again we ask, with Pearce, which accommodates which? Was it the flesh that changed to accommodate the fire, or was it the fire that changed?

The key to the riddle is to focus on the relationship between the two entities, and not upon the entities themselves.

But consider the power of visualization. So clearly do the firewalkers see the possibility of walking on fire, in such complete detail, with absolutely no trace of doubt in their minds that it is possible to do so, that they are in fact able to enter into a new relationship with the universe. In that new relationship, the life world (which is after all our constituted relationship with the universe) itself changes. The rules governing flesh and fire are not the same in that world. Consider what would happen to someone in the midst of firewalking who suddenly said to himself, "Flesh burns in fire; I can't do this."

We have an example from the Christian gospel story. The disciples of Jesus are caught in a boat in the middle of a storm. They are very afraid. They call for Jesus to come and save them. He is walking on the water. He calls them to come to Him. Only Peter obeys.

Peter so believed in the possibility being demonstrated to him by Jesus--the reality of "the kingdom" as it was called--that he stepped out of the boat and began to walk toward Jesus. Only after he was a considerable distance from the boat did it dawn on him that men do not walk on water. Immediately he began to sink.

For Dene children, especially before 1960, entering into a new category of being was a life and death survival challenge. Children watched their elders intently in the performance of life skills such as hunting or making snowshoes. It was not the abstracted, intermittent watching that children of industrial societies might engage in. It was total engrossment. The injunction "watch my hands work" became "be my hands working". This entering into a new category is fundamental to human learning.

The Balinese child had watched such dancing on fire all of her life and imitated the movements in play with ever approaching approximations long before the first "real" occasion. And long before that day came, the entry into that other rule system wherein human beings do in fact walk on fire was achieved (Pearce 1980:181).

It is critical to the examples cited above that in order to enter into a new category of being, a concrete vision of that possibility had to present itself, and the learner had to establish a relationship with the new image that was so detailed, so complete, so absorbing that, in relationship to that vision, no other reality system existed. What had been was left behind and was no more.

From where in the process of human development, does such a powerful vision of human possibility arise? In the case of the Balinese children, they have the example of their parents and peers. In the case of Peter, not only did he have the example of Jesus, but also he believed that if Jesus indicated a possibility, then it was indeed a possibility.

For both the Balinese children and Peter, belief played a major role in what occurred. We have as well the example of the Dogrib and Navaho shamans who heal by inserting their hands "through the ripples" of human flesh as if it were a flowing river. As well, we could reconsider the problem of Uri Geller. Geller was a television sensation in America in the early 1970s for his apparent ability to bend and move objects with his mind. When he was "exposed" as a charlatan by certain elements of the American scientific community, Geller went to England. There he made a BBC television appearance.

Pearce (1980) reports that during that appearance, Geller invited his audience to join him in bending forks and spoons or other objects with the power of the mind. Soon fifteen hundred reports were received by the BBC claiming that forks, spoons and other convenient objects did indeed bend or move about. The phenomenon was repeated in Scandinavia, Germany, South Africa, and Japan. Interestingly, the large majority of successful imitators of

Geller were children between the ages of seven and fourteen. Pearce suggests that this is because that age span is the period of suggestibility and concrete operational thinking.

John Holstead and John Taylor of the Department of Physics at the University of London brought a group of the children claiming to have imitated Geller into a laboratory setting to test their claims. At first nothing happened. But with encouragement and the building of trust, a flood of forkbending and other telekinesthetic phenomenon including "causing a metal rod inside a glass tube to tie itself in knots" (Pearce 1980:194) were reported.

Religious Knowledge

In human development, the content of the vision required is that of perfected humanness. We need to know what we can become, as individuals and as whole communitites. And even knowing what is possible does not tell us the wise course of action. It was possible for German propaganda experts to manipulate the public mind between 1938 and 1945 in Germany, but the results were catastrophic. It may be scientifically possible to generate a notion of genetically engineered humanoids with eternal tolerance for dull repetitive production-line tasks, or unswerving, non-reflective loyalty to anyone who gives them orders, but would it be wise? It was possible to build the atomic bomb, and perhaps inevitable that it would be built in an age when techne was both mother and father to us all, but now its shadow has completely obscured the possibility of any future at all for many human beings.

In societies where psyche and techne were more in balance, such as those of the pre-contact indigenous peoples of North America or pre-renaissance European societies which had not yet exchanged belief for doubt, one turned inward to religion for visions of possibility and wisdom.

To many contemporary thinkers, a turn to religion is a turn to vain superstitions and closet paranoia. I have stated that there are three categories of knowledge a developing people require in the process of their own development: 1) historical-hermeneutic knowledge, which reveals both the immanence of the past in the present and the interests and desires for the future of those mutually engaged in the process of interpretation; 2) phenomenological knowledge, which reveals the structures of the life world, which is the constituted relationship between human beings (individual and collective) and the universe; and 3) religious knowledge, which is constituted of an ever-proceeding vision of human possibility that draws human beings into our future, giving shape, meaning and goal to the self-constituting, self-elaborating enterprise of life.

That vision has three components: 1) the unfolding possibility of being ever more human in relationship to the rest of the universe; 2) a critique of the limitations of the current human condition; and 3) a description of the path leading into the vision (See Polak 1973:142).

The kind of religious knowledge I refer to here is often inaccessible through the established religions, precisely because most of these have eschewed the transformative vision of their founders for a form of individualistic, technocratic assurances of personal salvation. The notion that this world would become "another world", as in the "new Jerusalem" or "the kingdom of God on earth" was literally declared a heresy in 431 A.D. after the death of St. Augustine, one of principal Aristotelian vision killers of the Christian church.

Polak is most blunt on this point:

> The history of Christianity is the history of man's struggle to free himself from the fundamental message of Jesus: "The kingdom of God is nigh". Its failure to come posed man with a time-problem which has not diminished with the centuries. (Polak 1973:214)

The rationalization process that followed was institutionalized by the church in three ways, according to Polak:

1. De-imaging: the abstraction of so-called "essential doctrine" from the pulsing richness of early visionary imagery.

2. De-dualizing: the systematic removal of the "other" condition of a promised future. The

> church becomes the kingdom. The future becomes the present.
>
> 3. De-deifying: the bonds between the temporal events of the world and God are cut, since God will never establish His kingdom here. Hence, in a sense, "God is dead" for us, living only in some never never land that is totally disconnected from life as we live it. (Ibid:216-18)

The net effect of these efforts is the deeschatologizing of religion which then can no longer provide the transformative vision necessary for human development, but instead opposes and actively carries out a search and destroy mission against any image of the future that involves human participation in the recreation of the "life world". The world is seen as simply unredeemable, a complete reversal of the teaching of Jesus.

Polak's analysis of the effect this process has had on our culture is penetrating, and, I believe, accurate.

> This essence-pessimistic, monastic view of the world as a given and unchangeable reality eats into the other elements of the culture like a corrosive acid. It labels every idealistic attempt at radical improvement of the world as irrational and impossible. In other words, every faith in the future, whether utopian or eschatological, is intellectually and philosophically untenable, because any belief in goals, and particularly belief in an ultimate goal, is untenable. (Ibid:214)

The root capacity of human religiousness is the capacity to split human consciousness: to live in a present that is in essence a realized past, and at the same time to be pulled forward by a magnetic image of an idealized future. Man's

> mental capacity to categorize and reorder reality) or in relation to perceptions of the not-self (the other) enable him to be a citizen of two worlds: the present and the imagined. Out of this antithesis the future is born. (Ibid:1)

In attempting to elucidate the spiritual/religious dimension of human development in a way that touched [illegible] with the practical discipline of education, I have formulated a synthesis of some of the early unpublished work of the late Dr. Daniel Jordan, co-founder and principal exponent of the Anisa model of education (see Kalinowski and Jordan 1973, and Jordan and Shepard 1972) with my understanding of the perspective of native American cultures and human spirituality. The context of this formulation was a paper reflecting the fundamental operating principles and the philosophy of the Four Worlds Development Project, a native education project at this writing involved in human development activities with some twenty-five native communities across Canada.[14] What follows is adapted from that paper, published in 1983.

The spiritual dimension of human development may be understood in terms of four related capacities:

First, the capacity to formulate and/or to respond to non-material realities such as dreams, visions, ideals, spiritual teachings, aims, purposes and theories. The key which unlocks this capacity is imagination--the ability to imagine or "see" a new reality and enter it.

Second, the capacity to accept these realities as representations or manifestations of hitherto unknown human potential; the capacity to believe in a vision of the "other" human being and the "other" world.

Third, the capacity to give these non-material realities symbolic expression (through art, mathematics, language, or ceremony), which is related to the fundamental human quality of love; the capacity to be attracted (to the vision), to bind one's heart to its beauty, and to devote one's self to its realization.

Fourth, the capacity to use this symbolic expression to guide action that is aimed at translating potentiality into actuality. The doorway into this fourth capacity is volition, the ability to decide and to perservere.

But we must ask again, from whence do true visions come? Where can a bewildered people turn for a rejuvenating vision of human possibility that is embued with life-enhancing, life-preserving wisdom?

Five sources present themselves, and all of them are worthy of intense investigation. In stating them, I am suggesting that each may offer glimpses of human potential and may even function as an entry point into the process of human transformation. This entire formulation is itself based on a belief that there are ultimate unknowns underlying the ordering of the universe that, magnet like, draw us ever forward in the unfolding of human potential, and that there does exist meaningful and intelligent interaction between the collective human mind and this unknown reality, the standard shorthand for which is the term "God". But in our scholarship, "God is dead", and His mention is a blatantly awkward violation of rationalistic norms.

> Nietzsche, the Cassandra of modern culture, prophesied the consequences of the death of God, the abdication of transcendence, this period of gloom and eclipse, the like of which has probably never taken place on the earth...all [must] collapse now that this belief [has been] undermined, because so much is built upon it, so much rests upon it, and has become one with it... (Schaefer 1983:7)

I can offer no apology except that scholarship is fundamentally a search for truth. I do not purport to know very much about this ultimate reality called God, but to deny that such a reality exists in relationship to the evolutionary transformation of human beings would be to arbitrarily nullify the immanent history of the evolving human life world, in that every other age and culture known to us except our own claims that the unfoldment of their civilization was rooted in that ultimate relationship. It would also be to deny a broad spectrum of human experiences Arguelles roughly classifies under the dialectical pole of "psyche", now almost totally eclipsed, at least in the western scholastic tradition, by the technocratic, empirical, materialistic bias of "techne" (Arguelles 1975). And finally, it would be to deny my own heart.

Five Sources of Transformative Vision

1. Transformational Visionaries

In every age, and among every people there have appeared extraordinary individuals, who have had some direct experience with the farthest reaches and with the ultimate unknowns which underlie the ordering of the universe. Mystics, seers, prophets, visionaries, shamans, and avators all in some way bridge this mystic chasm between ultimate realities and human transformation. The greatest of these are the avators, the seed visionaries whose transformative vision provided the impetus for the re-creation of human civilization at certain key points in human history. Many of these individuals are unknown to us, for both their remembrance, and any identifiable traces of the worlds they engendered have slipped into the irretrievable past. Abraham, Moses, Krishna, Buddha, Jesus, Zoroaster, and Mohammad are but a few such figures known to western scholars.[15] But there were other figures, such as Crazy

Horse and Black Elk, great visionaries and seers of many peoples who were able to re-articulate the ever unfolding vision of human wisdom and possibility.

This source of vision is, on the one hand, the most reliable in that it is established historical fact that visionaries have led humanity to new vistas of civilization. It is also the most treacherous source. We have only to consider the example of Jonestown, Guyana to realize just how compelling and disastrous a counterfeit can be.

For this reason, if for no other, it is wise to rely on all five of the simultaneous approach ways to vision, and to approach the universe in the humble attitude of true questioning (Gadamer 1975), wherein the question is never settled, the dialogue never completed.

2. Premonitions from Inner Space

This second source of a vision of human possibility and wisdom includes dreams, insights and images born of meditative reflective activity, as well as flashes of intuition and premonition which burst into waking consciousness, often when least expected. C.G. Jung explored this domain of human knowing, and concluded that a portion of our being is constantly in tune with Being; i.e. with ultimate reality, and that it is possible to access reliable knowledge through a "descent" into these regions of consciousness. Such also, has been the teachings of many schools of mysticism and meditation. Yet, our culture has so deprecated the validity of this realm as a source of valid knowledge that we are, as a society, quite handicapped in accessing and making use of it. Cultures placing a greater stress on the "psyche" pole of human nature, which includes nearly all non-industrialized peoples, are far better able to derive useful insights from this domain of knowledge.

For example, dream hunting is still practiced by some northern Cree and Dene people. This method, which entails going to sleep with the intention of dreaming a successful hunt that is, upon awakening, actually played out in the physical world is no longer relied upon as it was in days past. The mere fact of its possibility as a successful method of obtaining food indicates the existence of human capacities to access the future and to interact with it that are quite unknown in the reality system we refer to as "modern".

It is my view that this source of direction holds great promise as one among a number of guides in the process of human development. This is especially true in the case of the indigenous peoples of the earth.

3. The Core of Culture

At the heart of every culture, including our own, may be found some form of essential human universals, as well as the seeds of the eventual disintegration and rebirth in some new configuration of that culture. Examining the core teachings and values which pulse at the center of any culture will reveal clues as to what is possible and wise in terms of the creation of the future. To the extent that every culture was once a brilliant innovation, was once the just-transformed life world of a human community in relationship with the universe, means that to the extent that some of its universal insights can be gleaned, the framework for future insights may well have thereby been established. The vision quest, in human development, is often a search for a pathway long ago abandoned and now very difficult to find obscured as it now is by complex abstractions and a host of competing human interests.

It is also important to bear in mind that no cultural transformation results in a complete break with the past. What was wise and good in times past may well be universal to all times. This wisdom and the insights that gave rise to it constitute, for any people, a safe standpoint from which to undertake the reconstitution of "the world". It may well be the case that this standpoint will ultimately be transcended, but it is nevertheless essential that a beginning be made here.

4. The Perennial Philosophy

There has appeared, in the traditions of hundreds of cultures, but committed to writing some twenty-five centuries ago, a myriad of restatements of an essential human experience--the experience of the absolute. Huxley (1945) in his comprehensive essay on the subject borrows Liebniz's term, and calls it the perennial philosophy. At all times, and in all places, the same fundamental experience and insight have been reiterated. As Huxley put it,

> The divine ground of all existence is a spiritual Absolute, ineffable in terms of discursive thought, but (in certain circumstances) susceptible of being directly experienced and realized by the human being. (Ibid:21)

There are two aspects to the perennial philosophy as a source of vision for human development: a) the study of the many and various manifestations of its appearance, so that, little by little, a sense is gained of the nature of the experience that lies at its foundation, and b) a serious attempt to pursue the experience directly, guided by the efforts, records, and testimonies of those who have undertaken the journey beforehand. The reason for both endeavors is the same. Human development is fundamentally an evolving relationship between the human being (manifested individually and collectively) and the universe. It is therefore critical that developing human beings directly encounter the most profound depths of that intercourse humanly possible.

If the testimony of a hundred thousand seers and mystics from hundreds of ages, cultures and traditions can be relied upon, the experience of the Absolute is a fundamental dimension of all humanness. It is the birthright of every human being. It is the tree of life, that brings forth the flower and fruit of every civilization.

5. The Discoveries of Scientific Research and Technological Development

Not only did Copernicus and Galileo effect a revolution in scientific thinking, but they turned the ordinary world upside down. For no longer was man and his earth the center of the universe, and no longer was faith enshrined in the institution of the church, no longer was Rome the center of the world. Each major scientific and technical revolution changes the standpoint from which human beings encounter the universe. The lever, the road, the wheel, money, sailing ships, geometry (leading to global navigation), gunpowder, the discovery of perspective in art, printing, the steam engine, the industrialized factory, the airplane, the snowmobile, telecommunications, the atom bomb, the microchip--each of these scientific/technological developments changed the life world of human beings. Each changed the relationship human beings had with the universe. As such, each provided human beings with a new vantage point from which to address the universe. We have numerous thoughtful studies which declare the dehumanizing levels of technology (Ellul 1967, and related directly to the problem of human development, Spicer 1952). I am suggesting that each revolutionary scientific insight, such as the development of quantum theory, bears the seeds of both catastrophe and extraordinary opportunity. Much of what I have termed the "the evolutionary transformationalist paradigm" stems from insights that are directly or indirectly derivative of "new" scientific insights or technological development.

Religious knowledge, it may be said in summary, is process knowledge. It refers to the fundamental conversation between human beings and Absolute Existence. It is the source of vision, whether that vision be expressed in mytho-religious, or techno-scientific dimensions of human knowing.

> Said the father, "Bring me the fruit of the nyagradha tree."
> "Here is one, sir."
> "Break it."
> "It is broken."
> "What do you see there?"
> "Some seeds, sir, exceedingly small."
> "Break one of these."
> "It is broken, sir."
> "What do you see there?"
> "Nothing at all."
> The father said, "My son, that subtle essence which you do not perceive there--in that very essence stands the being of the huge nyagrodha tree. In that which is the subtle essence all that exists has its self..." (From the Chandagya Upanishad, cited by Huxley 1945:3-4)

VI. Towards an Authentic Pedagogy for Human Development

We began by saying what development is not. It is not mere economic growth. It is not merely "modernization". Yet, the process of human development certainly has an economic dimension, and certainly the process of modernizing, in the sense of taking advantage of the most advanced, yet appropriate technology available to accomplish self-created objectives, or simply to survive "better", is all a part of what we must mean when we say "development".

It will be helpful to repeat the six principles articulated at the beginning of this section used to describe the evolutionary transformationalist view of human beings:

1. The human species is engaged in a perpetual process of emergent becoming.
2. This evolution is fundamentally a cultural and spiritual process, but is expressed simultaneously in many human activities including the personal, social, economic, geo-political, ethical, legal, technical, biological, ecological and philosophical-theoretical domains. Hence a wholistic approach to understanding human processes is indicated.
3. Human beings can be conscious participants in their own evolutionary process, and as such can help to direct the course of human development on

this planet.

4. The emergent outcomes of the human evolutionary development process is the transformation of the relationship between human beings and the universe (see Pearce 1980:185-6) which is, in effect, the transformation of the "world".
5. The human evolutionary transformation process can only be understood in relation to the wholeness of the universal context of which humanity is a part. This context includes the ultimate unknowns underlying the ordering of the universe.
6. The ongoing process of human transformation necessarily subsumes and incorporates all previous human development into current stages of the process, but that entirely new dimensions of human possibility, not pre-figured in previous stages, are constantly emerging.

There is no way to think about authentic human development in view of promoting it without also thinking about the nature of human beings. And there is no meaningful way to think about human beings except in terms of our evolving relationship with the universe. Attempts to do a "frame-by-frame" analysis, that is, to abstract man from the process of the life world has led to education and development practices and policies that are fundamentally dehumanizing, and that actually inhibit the unfolding of human potentialities.

It seems that since one cannot stop the merry-go-round of life in order to understand it, one is forced to climb aboard. But no sooner does an "investigator" enter into the process he wishes to investigate but he discovers that he is being changed by it. All hope of objectivity vanishes. He suddenly realizes that the only way to investigate the process is to collaborate with others in an effort to understand what everyone is experiencing and, as it turns out, creating together.

It gradually begins to dawn on him that he had been operating under a grand delusion prior to his joining the others. He had somehow fancied himself to be apart and objectively separate from the swirling confusion of the merry-go-round, while around him the dusty teaming chaos of the amusement park, of which he and everyone on the merry-go-round were always a part, rushed on like a tidal river.

It appears that there is no way to understand the process of human development except in the dialectic of mutualistic action in and upon "the world" and reflection upon that action. Hence development thinking is essentially praxiological. In considering the six principles listed above, I have had to translate each principle into a "story" (Novak 1978:65). By this I mean I have searched for incidences from my own life experience, of which the principle is a mere abstraction. When my "story", corres- ponding to each principle was a vivid and authentic reality for me, I then could say that I had "understood" (i.e. to stand under, so that one's life experience is a true foundation for the concept) the principle. From such an understanding comes the possibility of collaboration with others in the enterprise of human development. That collaboration is the mutualistic foundation of development pedagogy.

An authentic development pedagogy must somehow be rooted and have its life in the process of development itself. It cannot be separate and apart. It must therefore be considered in the light of the following aspects:

1. Development is a process.
2. Development unfolds in the relationship between the human being (individual and collective) and the universe and, not only with one or the other of these interrelated poles.
3. Therefore, development is a collaborative enterprise between human beings and the ultimate unknowns underlying the ordering of the universe. While in one sense it is true that man makes himself, it is also true that he is continually re-created in relationship to a reality which transcends the human life world and prevades the

universe.

4. Development is wholistic in nature, that is, the various domains of human potentiality are all interrelated and therefore affect one another.

5. Development is simultaneously immanent and transcendent in nature. Janus like, the face of development looks two ways; to the past as it unfolds into the present, and to a vision of the future as it draws human beings into its vortex.

6. Hence, the role of three categories of knowlege are critical:

   a. historical hermeneutic - revealing the immanence and meaning of the past as it emerges into the present;
   b. phenomenological - revealing the structures of the presently constituted life world;
   c. religious - revealing unfolding human potentiality in the light of life-preserving, life-enhancing wisdom, which corresponds to the future.

7. Development is mutualistic, meaning that it unfolds as human beings collaborate as partners. Development is not bestowed. It cannot be promoted from outside the process. It therefore affects and changes the educator as much as anyone else in the process.

8. Development is participatory in that the subjects of the process must engage their own imagination, belief, love, and volition. They must be knowing,

acting subjects in their relationship with the known and unknown universe. Paternalism, manipulation and coersion can only undermine that relationship and inhibit the development process.

9. Development takes time. It is not an instant-add-water-and-stir affair. There are long periods of seeming inactivity, as when the anxious gardener waits for the first signs of new seedlings breaking ground. There are set backs. There are dramatic rushes of activity that appear to be final in nature, but the results of which, when the dust has settled, appear to amount to very little. And what appears to amount to very little can be of enormous and crucial importance, when the potent process of time, and the proper circumstances are combined. The gestation period for a human fetus is nine months in the womb, and about fifteen years after that. The time for the rebirth of a people falls into a similar category. Consider these words of Nietzsche, then writing about the downward cycle of European civilization, and the time it would take for the bitter fruit of spiritual rootlessness to ripen in the womb of the world, and know that every hour of darkness has its dawn, and every dawning has its brilliant sunrise.

> Lightening and thunder need time,
> the light of the stars need time,
> deeds need time, even after
> they are done, to be seen and heard.
> (Nietzsche, The Joyful Wisdom, No. 125,
> cited in Schaefer 1983:7)

The problem of development pedagogy is a practical one, as is the closely related problem of curriculum. Once one's practice is grounded in an experientially based understanding of the process of human development, development pedagogy becomes "true conversation" in the sense that Gadamer used the term. There is no "application" of theory. The hermeneutic sense of the concept of application is really a kind of interpretation and understanding combined and brought to the realm of action (Gadamer 1975: 275). It is something that can only be done in a spirit of collaborative mutuality.

> The person who is experienced in the world, the man who knows all the tricks and dodges and is experienced in everything there is, does not have the right understanding which a person who is acting needs; he has it only if he satisfies one requirement, namely that he too is seeking what is right, i.e. that he is united with the other person in his mutual interest. (Ibid:288)

Hence, if as an educator I have any desire to promote and assist in the process of human development, I will somehow have to step outside the role of "educator" and become a person, and eventually a friend, to my co-partners in the enterprise of transforming "the world".

Part Five: The Process of Development Education

I. The Context

We freely apply the term "learning" to a wide range of human phenomenon; a baby "learns" to recognize her mother's voice while still in utero. A few days after birth she will "learn" to recognize her mother's face. Later she will "learn" to read and replicate a spelling list. A corporation "learns" how to respond to shifting market conditions. And an entire people "learn" or fail to "learn" how to live in a new environment or under new historical conditions.

Conscious intervention into the lives and patterns of others to cause "learning" to take place only accounts for a miniscule proportion of the total spectrum of human learning. The fundamental basis of all human learning is the structure of our relationship to the universe. That structure in its infinitude of individual variations may be called personality. As a collective phenomenon it is called culture. It constitutes our habitual way of seeing, making sense of and interacting with experienced "reality".

That total set of relatively enduring patterns of meaning making and interaction constitutes for us the context in which we live out our lives. It is our "world". We are "in" that "world" as a fish is in the water and, as parochial wisdom puts it, it probably wasn't a fish that discovered water.

For I live out my days on a practical plane. I often act, react, and interpret without ever penetrating the veneer of independent choice to the underlying structures which contribute to the possibility of my choices. I ride the tip of the iceberg with little or no thought to the mammoth mass of ice that is hidden beneath the surface of the water, a mass of which the tip is a mere token. While I have learned most of what I know through practical involvement with the "world", I have also been taught by others whose practical interest was to maintain the pattern of human life as they know it.

James Botkin and his colleagues referred to "maintenance learning" as the "acquisition of fixed outlooks, methods and rules for dealing with recurring situations..." (Botkin et al 1979:10). The concept of maintenance learning can be generalized to include the entire process of inheriting or reproducing the "world" from generation to generation. That process becomes a conscious one only gradually, as if we are discovering the immanence of some ancient game which we have awakened to find ourselves in the midst of. Many of the rules of this game were transmitted to us through a process of psycho-social osmosis, long before we could ever formulate an abstract description of those rules. Later, some of the designated necessary knowledge, skills and attitudes are "taught" to us by the intention and design of our forebearers. This aspect of the total learning process is what we have called "education".

II. Learning for Survival

Botkin et al. go on to describe a pattern of maintenance learning interrupted from time to time by crises of various sorts. These crises could include a natural catastrophe (such as the ice age), a war, a famine, a major technological breakthrough, or a fundamentally disruptive social-economic process such as slavery, the introduction of a cash market nexus, industrialization or revolution.

These crises necessitate short periods of "innovative learning" because the patterned assumptions and responses of the past, based on a particular relationship with the constellations of environments we have called the "universe" no longer exist. They have broken down. The inner coherence of rule-based responses to "novelty" has dissipated, because the context that gave meaning and rationale to those responses is no longer intact. The psycho-cultural response to such a state of affairs is usually shock and bewilderment, followed by a short burst of innovative learning which restores order, albeit in a new form. Then a long period of maintenance learning again sets in. Business proceeds "as usual" unmindful that eventually another crisis will occur, again to shock human beings into a temporary state of what Adofo Sanchez Vasquez has termed "creative praxis". Vasquez explains:

> Man must constantly invent or discover new solutions; and once they have been put into action, he cannot simply go on repeating or imitating what had previously been the case, in the first place because he is constantly creating new needs which invalidate previous solutions, and in the second, because their inadequacy was revealed by the new exigencies of life itself... Man does not live in a constant state of creativity, but creates out of necessity, in order to adapt himself to new situations and to satisfy new needs. He will repeat what is given until he is called upon to create something new. (Vasquez 1977:201)

The fundamental fact that Vasquez's remarks do not reflect is that the entire planet is already engulfed in a crisis that is at once ecological, economic, political, military and spiritual. Virtually no society has been left untouched. The consequence of shock learning in the later quarter of the twentieth century could range from the massive social disarray in Canadian native communities to thermo-nuclear war, politically induced global famine, or the poisoning of the entire ecosystem upon which all life depends for breath, water, and food. I have already suggested (in Part Four) that human beings have entered into a new phase in their development as a species; one in which we must consciously, unitedly, and wisely participate in our own social-evolutionary process. I do not believe there is any way to turn back from this prospect which is at once fraught with danger and laden with opportunity.

And I believe that, taken in this context, Vasquez is wrong. Increasingly human beings will live in a state of constant creativity, or else, in the short run, we will not survive. In the long run, the creative advance of "order entering upon novelty" (Whitehead 1979:339) is the fundamental process of human existence. We can no longer afford to wait upon "scarcity, emergency, adversity, and catastrophe" (Botkin et al. 1979:10) to shock us into temporarily becoming our true selves.

III. Development Promoting Education

The promotion of human development through education calls for a reconceptualization of what we mean by the terms "education", "educator", "pedagogy" and "curriculum" to conform with our best understanding of what it is to be a human being developing with other human beings in the evolving context of "the world".[1]

1. Education

Education must become intentional promotion of positive human learning. "Positive learning" is the process of getting to know, make sense of and creatively interact with new aspects of universal reality in ways that promote the well-being and the continued development of the learner(s). (Contrast this with "negative learning" which promotes a relationship with universal reality that is harmful, life-threatening, or anti-developmental.) Positive learning is necessarily wholistic in that it engages the entire being of the learner in all the domains of potential development including the cognitive, the physical, the emotional, the spiritual and the volitional domains. Positive learning is the essential dynamic of the human development process. Both individuals and human collectives learn.

This type of education may be carried on in many ways. Coombs and Ahmad's (1974) classification is useful but incomplete. They refer to informal, non-formal, and formal education. Their classification is helpful in that it equates education with learning, regardless of how or where the process takes place. It is incomplete in that the broadest category, that of informal education, is not treated as a serious domain for conscious educational activity.

By informal education, Coombs and Ahmad mean the "lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experience and exposure to the environment" (Ibid:8). This they contrast to non-formal education (which they define as "organized, systematic, educational activity carried on outside the framework of the formal system") (Ibid) and to formal education, which refers to "the highly institutionalized, chronologically graded and hierarchically structured education system spanning lower primary school and the upper reaches of the university" (Ibid).

It is primarily in this informal domain, in life as it is lived, that most human learning occurs. Our western tradition of education has largely ignored this domain preferring to follow the lead of the post-Socratic Greeks in pursuit of abstracted theoretical knowledge. Native societies in the Americas, by contrast, treated education and life as one conscious, integrated process and considered the daily activities of ordinary life to be the primary curriculum. Even the most highly formalized of all indigenous pedagogical tools--the ceremonies--were rooted in the meaning-making system of the life world, and were largely intended to function as models of how to live various aspects of ordinary life.

In so far as education implies guiding learners in a process of interaction with the various environments toward the achievement of educational goals (Streets and Jordan 1973:30), the field of development education must concentrate on the various dimensions that comprise the environments of ordinary life as a primary focus. Only a supportive and secondary role can be accorded to non-formal and formally constituted programs.

It is not that the latter are not significant in the overall process of development. If is rather that the formal school system and non-formal programs must be reconstituted to modify and enhance the process of life itself. In so far as they are not praxiologically related to the process of the life world, they are not educational, in the sense that authentic education unfolds in the unmediated dialogue between developing subjects and the universe.

2. Educator

The term "educator" is also problematic to the concept of development promoting education. This is certainly not because there is no role for an educator, but because of the narrow and misconceived notions the term conjures up. These misconceptions derive from the experience of schooling in industrial cultures wherein the educator is a technocrat.

Paulo Freire calls what this sort of "educator" does "banking education" because the teacher makes deposits of information into passive receptacles (the students). He summarizes as follows:

> a. the teacher knows and the students are taught;
>
> b. the teacher knows everything and the students know nothing;
>
> c. the teacher thinks and the students are thought about;
>
> d. the teacher talks and the student listens--meekly;

> e. the teacher disciplines and the students are disciplined;
>
> f. the teacher chooses and enforces his choice, and the students comply;
>
> g. the teacher acts and the students have the illusion of acting through the action of the teacher;
>
> h. the teacher chooses the program content, and the students (who were not consulted) adapt to it;
>
> i. the teacher confuses the authority of knowledge with his own professional authority, which he sets in opposition to the freedom of the students;
>
> j. the teacher is the subject of the learning process while the pupils are the mere objects. (Freire 1970:58)

By contrast, authentic (development promoting) education begins in love, a reaching out from heart to heart. It is grounded in a relationship between human subjects which does not admit the reification of the roles of any of the participants. The educator is not one who knows and is thereby granted power over others who do not know. The educator is a developing subject and with other developing subjects, engages the universe in dialogue.

> Together we will cross the bridge.
>
> But I am afraid Papa. See how it sways
> in the wind. See how far it is to the
> rocks and the river below.
>
> I have been afraid like you. Take my
> hand. Together we will cross the
> bridge. You will see. Come.

The process of authentic education educates all its participants. The educator learns how to touch the hearts and inspire the courage of others. The educator is as much "taught" as are all the other learners in the process.

There is a sense, it is true, in which the educator has something that his co-partners in the process do not have, but need. The converse is also true. What it is that a stranger to the process of a people's world has to teach them cannot be taught and remains forever frozen in another dimension until it is released in the mutualistic dialogue that emerges out of an effort to transform some aspect of a shared "world".

Although I cannot "learn" you how to do anything (e.g. ride a bike, balance the books, speak French) I can help you to learn. That intervention, in whatever form it takes, is teaching. In so far as the teacher becomes a guide and a resource in the learner's own engagement with that aspect of the world, a resource that assists her to achieve her potentialities in this domain of endeavor and to meet her learning objectives, it may be said of that action that it is "teaching", and of the person who assists in that process that he or she is at that moment "an educator".

The one thing an authentic educator does not do is to mediate between the subjects of a learning process and the various environment(s) (whether it be the biological, ideational, socio-cultural, political, personal/psychological, spiritual or unknown environment) with which the learner is engaged.

To do so would be to rob the developing subjects of the very essence of the learning experience. The passing on of an abstracted version of a vicariously experienced dialogue with the "world" to passive recipients who believe they are "learning" constitutes educational fraud.

When we are speaking about education as the promotion of human transformation in the context of non-industrialized peoples (or for that matter in any cross-cultural context) the burden of research and the need for genuine humility must needs weigh heavily upon any who would be an educator.

In order to be an educator in that setting, one must let go of the role of educator, and allow one's self to be led, to be guided by cultural insiders. One must become (and remain) a learner and one must establish genuine heart to heart relationships with those one wishes to work with. In that relationship one can gradually become "an educator".

Dialogue is an essence component of the process of human development. But establishing a mutualistic dialogue between would-be educators and learners is not enough.

> The point is that the commitment to establish mutuality and trust...often stands alone in educational discussions, as if it is the necessary and sufficient condition for learning to occur, the dialogical relationship between the I and the Thou. While dialogue is necessary, it is not sufficient. Pedagogy is

> not just an existential encounter. We cannot assume that the rest will somehow happen... Education has no absolute value--nor has dialogue. It is for a purpose always. The dialogue must not and in fact cannot exist solely as an intangible intersubjective way of relating, but must be translated into the physical and social world--into the very mechanics of our lives... (Ross 1981:34)

In the final analysis, one is an educator only if one is engaged in the process of transforming "the world".[2]

3. Pedagogy

Pedagogy is a peculiar term to use, when referring to the life-long process of education that is human development. The origins of the term are two Greek words: "pais" or "paidos" which means "child", plus "agein" which means "to lead"; hence "paidagogos", the process of leading the child. But where! Where do we lead the child? And who is fit to lead? And beyond that, when is a person no longer a child? Is Freire's Pedagogy of the Oppressed after all a contradiction in terms, in that he is conceptualizing the learning "oppressed" as children who need to be led?

I think not. What Paulo Freire has done is to return to the essential process of education. Perhaps the slave-based, contemplative theory idolizing civilization that gave name to the phenomenon understood the process in a limited way. We do not need to be bound by that perspective. I will use the term "pedagogy" to mean the evolving structure of an educator's consciousness concerning teaching and learning which gives rise to his or her educational praxis.

In order for this definition to make sense the term "praxis" needs to be examined. "Praxis" describes the interactive dynamic of reflection upon action and action informed by reflection.

> Praxis is purposeful, intentional and reflectively chosen ethical action... To understand praxis requires a shift in consciousness away from dichotomizing theory and practice, toward seeing them as twin moments of the same activity that are united dialectically. Instead of leading to practice, theory becomes or is seen as the reflective moment in praxis, and articulated theory arises from that praxis to yield further praxis. (Groome 1980:152)

The Yugoslavian thinker Gajo Petrovic connects the concept of "praxis" with that of being itself. He points out that according to Marx, man is that being which "is in the manner of praxis" (Petrovic 1965:26).

This is not a generally acknowledged interpretation of Marx, of course. We are all familiar with those redirections of Marx's thought that classify man as an"economic animal", or a "working animal" or "homo faber". But, says Petrovic, such "vulgarizations" are superficial in their penetration of Marx's view of man. To Marx, man is a self-constituting being. He is alienated from his own potential as long as he is ruled by structured reductionism of any kind.

The term "praxis" is one that can easily be misread. Petrovic cites five popular usages of the word "praxis" in everyday German:

a. a particular custom or habit;

b. the exception that shows up the rule;

c. the same as "encounter" or "experience"

d. "practice" as in "to practice the piano";

e. a doctor's "practice".

None of these definitions capture the usage described by Groome cited above (Groome 1980:152) though all of these elements are present and contribute something to the total concept Groome (and I) wish to convey in our use of the word.

Philosophical usage is equally confusing. Aristotle, Plato, Kant, Hegel, Marx, James and Sartre all added dimensions of meaning to the concept, and the latter writers themselves owe a great deal to Judeo-Christian notions of man as a being whose nature it is to unfold, to become.

Adolpho Sanchez Vasquez added depth and usefulness (for educators) to the Marxist theory of praxis in that he distinguished between "creative" and "reiterative praxis" and went on to delineate the dimensions of creative praxis:

> Praxis...is essentially creative; yet between one creative period and another, and during periods of truce in his active debate[3] with the world, man may

> repeat an already established praxis.
> (Sanchez 1977:201)

When the process of acting upon the world, and then penetrating the mere practical task in the process of reflection to further enhance and inform the action results in a new form of action (a strategy, a technology, a mode of practice) that Sanchez calls "creative praxis". In and through that process, man re-creates himself. When a new innovation is repeated, or "bureaucratized" or "mechanized", Sanchez refers to this process as "reiterative praxis". He is clear to point out that any social process that becomes congealed in a reiterative praxis eventually deprives human beings of an essential component of human development-- creativity. To the extent that a practice becomes entirely reiterative, having no creative aspects to it whatsoever, the term "praxis" is, I feel, inappropriate. On the one hand Sanchez states that "praxis...is essentially creative" (Ibid:201). On the other hand the presence or absence of the various dimensions of creativity determines for him, the degree to which a praxis may be said to be a "reiterative praxis". A solely reiterative praxis is no praxis at all.

A solely reiterative educational praxis, one that replicates forms and formulas derived from other contexts, cannot be said to be genuinely educative. When the "subjective [such as a curriculum] is objectively presented as a kind of Platonic ideal which is copied or duplicated in the real world", there is a marked absence of true creativity. This is because in

> creative praxis, the product requires not only a modification of the material, but also of the ideal (or end); the ideal of reiterative praxis, on the other hand, remains immutable throughout [in creative praxis] the ideal itself must adjust to the demands of the material and to the unforeseen changes that occur during the practical process. (Sanchez 1977:209)

Any "educator" caught in such a praxis is perpetrating a domesticating, dehumanizing pedagogy, in that it makes learners over into passive recipients of vicariously generated empty forms.

The second contribution Vasquez has made is his delineation of the various dimensions of a creative praxis. He first points out that "all truly creative practical processes (of which authentic teaching and learning would certainly qualify) involve the loss of the original project which set them in motion" (Ibid:203). He is quick to add that the original goal never ceases to be a determining factor. He cites Marx to argue that the end or purpose actually

> "gives the law to...the modus operandi"... it is only revealed as a law, however, when the process is complete; it could not have been [theoretically] established prior to the initiation of practical activity... (Ibid)

In other words, a truly creative practice does not begin in theory. It begins in action in and upon the world. Also, a creative praxis is not an entirely predictable process. The unforeseeable, the unpredictable and the unrepeatable characterize all truly creative enterprises.

Finally, there is an indissoluble unity between the subjective and "objective reality" in creative practice. That is to say that the vision one sets out to fulfill is, in the very first place, informed by some aspect of the concrete life world, and as one proceeds in the process of any creative enterprise, the vision and the object of the transformation process are continually informing, and in a sense, editing one another.

While there are elements that are in some senses foreseeable, predictable and repeatable in the process of human development, these are subelements of what is primarily a creative process. It is therefore clear that a development promoting pedagogy must also be a creative praxis.

But I have said that pedagogy gives rise to educational praxis. It is that which makes it possible. What differentiates one educational praxis from another is the view of human beings and the degree of comprehension of the nature of the human development process that guides the educator. This knowledge may be held in two ways, theoretically and praxiologically. Both modes of knowing are essential in education.

Theoretical practice has the power to transform perceptions. It can function as guide in the activity of reflecting upon action taken. It can assist in formulating strategies for future actions. Sanchez comments

> True knowledge is useful to the extent that on the basis of that knowledge man is better able to transform reality. Truth entails a spiritual reproduction of reality that is not an inert reflection but an active process which Marx defined as the ascent from the abstract to the concrete in and through thought and in close connection with social practice. (Ibid:171)

But an abstracted knowledge of the nature and processes of being human uprooted from life will not be of much help to the one who is struggling to transform some aspect of his world. What that one needs is a partner to struggle with him who can penetrate the superficial meaning of the present aspect of a life-long process, and who can help him to modify his responses within the universal dialogue to bring him that much closer to the realization of his true potential. This sort of knowledge of the nature and processes of being human may be termed praxiological knowledge, in that it is grounded and manifested in and through practice.

Authentic development pedagogy then, is transformationalist in its perspective on the nature of human nature (see Part Four), is mutualistic in that it automatically engages all participants of the learning process in the devising of means to promote learning; is motivated by a genuine interest in promoting the human development of all participants in the process (including the educator), and is praxiologically engaged in a process of its own self-transformation.

4. Curriculum

When curriculum is conceived within a life world, the fundamental reality of which is process, then curriculum itself must be conceived as a process. Within the context of development promoting education, curriculum consists of the process of interaction between learners, and the constellation of environments I have labelled "the universe"[4] through which positive learning takes place. Positive learning is the process of getting to know, make sense of, and creatively interact with new aspects of universal reality in ways that promote the continued unfolding of the full range of human potentialities latent in the learner(s).

So conceived a curriculum is not a document or a set of educational objectives. Neither is curriculum that which an educator does to promote learning, though all of these things may be an important component in a curriculum process.

The process of developing curriculum is the process of guiding interaction between learners and "the world". The word "guiding" could be problematic if it is not divested of its authoritarian connotations and grounded in a mutualistic relationship between all participants in a learning process. It becomes clear that, so conceived, "curriculum development" and the process of teaching and learning are aspects or "moments" in one process.

Just as authentic development pedagogy is grounded in a creative praxis, so it must be said that authentic curriculum, i.e. curriculum that generates human development, is praxiologically grounded, and as such, is fundamentally a creative process. The traditional notions of developing, for example, a social studies "curriculum" at a department level and then attempting to legislate its use in hundreds of schools, expecting that the ideal articulated in documents and communicated through in-service workshops will somehow become "reality" through the process of implementation[5] is, at best, ill conceived.

The curriculum implemented in the schools will not be, in the first place, the one that was conceived, articulated, approved and legislated for use on a level abstracted from the learning process. The intervening aspects of teacher as curriculum, peer group as curriculum, school organization and administration as curriculum, community life as curriculum, etc. will assure that a great deal of what was conceived will never reach the students, and will not generate the kind of learning the curriculum developers had anticipated.

Secondly, following Sanchez, the conceptualization of curriculum as a Platonic ideal to be duplicated in the real world of the classroom (or other designated learning site) promotes a reiterative educational praxis, which is, when taken to its practical extreme, no praxis at all. Action with learners in and upon the world, and reflection on that action, also with learners (at least to whatever extent that is possible) cannot help but reflexively alter the ideals and understandings of educators involved in the process. Therefore "curriculum" conceived as an idealized immutable reality, not grounded in the life world of learners, and not constitutive of a dialogue between learners, educators, an educational ideal or plan, the community and some aspect of "the world" to be transformed is no curriculum at all, legislation to the contrary not withstanding.

It will be helpful here to return briefly to Gadamer's explanation of the openness of true questioning and the conduct of a conversation. For education that would promote human development must be embued with an openness to hitherto unforeseen possibilities in the conversation between co-partners in an educational process on the one hand, and the universe on the other.

> In order to be able to ask, one must want to know, which involves knowing that one does not know... The openness of the question consists in the fact that the answer is not settled. (Gadamer 1975:326)

How can we feign openness to human possibility in our educational praxis if for us the matter of outcomes is already an objectified reality enshrined in "the curriculum"?

> To conduct a conversation means to allow oneself to be conducted by the object to which the partners in the conversation are directed... The hermeneutic productivity of the Socratic dialogue, the art of using words as a midwife, is certainly directed toward the people who are the partners in the dialogue, but it is concerned merely with the opinions they express, the immanent objective logic of which is unfolded in the dialogue. What emerges in its truth is the logos, which is neither mine nor yours and hence so far transcends the subjective opinions of the partners that even the person leading the dialogue is always ignorant. (Ibid:330-1)

The art of making curriculum is the art of keeping the conversation going between learners and the universe. The fateful separation between the theory of education (as manifested in the established "curriculum") and the practice of education, in classrooms (or wherever else it may occur) interrupts that conversation, bureaucratizes educational praxis, and is therefore fundamentally subversive to the process of development promoting education.

5. Action Research and Curriculum Development

Kurt Lewin coined the term "action research" in the 1940s to refer to a methodology that could combine social investigation and transformative social action into one process (See Lewin 1946, 1947, 1952). The methodology includes a spiraling series of cycles penetrating ever more deeply into some aspect of the world as problem. The process of investigation is also a process of engagement and transformation. Each cycle involves analysis of the field of action, deliberation with the participants on the appropriateness of the analysis and on the opportunities, possibilities and constraints of the problem, the making of a general plan, which includes a means of monitoring the effects of action taken, taking a first step, evaluating, learning from the action and for the next action, replanning, more action, and so on until the general plan has outlived its usefulness. Then a new cycle begins (Kemmis 1982:13).

The "research problem" is also a social problem that affects real people, and it is those people who become the co-participants (along with a research facilitator) in the research process.

Like its reincarnation of the 1970s and 1980s, "participatory research", action research does not feign objectivity or the aloofness of the investigative process from life and the struggles of real people. Nor does it separate theory from practice.

The conjoining of theory and practice in the generating of a curriculum process for human development can follow a similar developmental pattern as that of action research.

There are moments of observation, of planning, of acting and of reflecting. All of these are dialectically connected to one another both in discourse among the participants and in action taken in and upon the world.[6] There are some senses in which it could be said that all four modes are social (i.e. intersubjective) activities, and other senses in which they may be seen as highly individual and even agonizingly lonesome endeavors.

Rather than struggling to ground abstracted talk about the process of development, and relate it theoretically to "curriculum", let us now turn to a concrete example of a curriculum process constituted with the expressed intent of promoting human development. From this description, I will draw guiding principles that will assist in understanding what authentic curriculum is, and how it may be generated.

IV. The Four Worlds Development Project

The Four Worlds Development Project is a university based research and development project dedicated to promoting human development through a broad spectrum of education and community development activities in native communities. The project was constituted in response to direction and guidance from the native community and continues to receive its primary inspiration from the creative action and insights generated at the community level.

The Four Worlds Development Project was officially constituted as a Faculty of Education project at the University of Lethbridge in July of 1983,[7] but a group of like-minded native people and educators had been working together on an ad hoc basis to promote human development in native communities for several years before that.

In the fall of 1982, this group was approached by Health and Welfare Canada's National Native Alcohol and Drug Abuse Program (NNDAP) with the possibility of core funding to undertake an education project that would address alcohol and drug abuse from the standpoint of prevention in native communities across Canada.

A pilot phase was funded initially to probe the potential of such a project. During the pilot phase, three significant activities were undertaken. First, the team helped to conduct an educational evaluation process with Alexander Indian Band near Morinville, Alberta to determine the overall effectiveness of Indian Affairs sponsored schooling in that community, and to assist the band council to move toward local control of education on the reserve.

Second, a major information gathering and analysis was undertaken to assemble the most recent research relevant to a) the prevention of alcohol and drug abuse, b) the promotion of human development through education, and c) the transformation of human socio-cultural contexts through community development projects.

Third, a major working conference was held at the University of Lethbridge. To this meeting were invited forty prominent native elders, spiritual leaders, and professionals from across Canada and the United States. This highly significant gathering was asked to deliberate on the problem of native alcohol and drug abuse. This gathering provided guidance which set the initial directions for the Four Worlds Development Project.

The Lethbridge Gathering

Two fundamental questions were posed for deliberation:

1. What are the root causes of native alcohol and drug abuse?
2. What must be done to eliminate the problem?

It was clear from the start that the elders knew the problem to its very core. They had lived it, suffered it, and seen their loved ones die of it. Yet they did not seem in the least discouraged by the apparent hopelessness of the situation.

They were not to be dissuaded, I believe, because they saw something that those of us who have studied the problem through the lens of the medical or disease model of alcohol and drug abuse have not been able to see. They saw the essential capacity of human beings to develop; to individually and collectively re-create themselves in a new image.

Four key strategic principles emerged from this conference:

1. The heart of the problem lies within the native communities. The solution therefore, must come from within those same communities. Others may assist, but the native people must be subjects of the healing process, and they must direct that process themselves in their own way.

2. The future is inseparably linked to the past. Native people must rediscover the life-perserving, life-enhancing values of their own traditional culture. They must also come to understand the debilitating historical process they have undergone as a people. They must then rise up, united in a new vision of what human beings can become, and build a new future for their children that is based solidly on the values foundation of their own culture.

3. In order for native people to be able to become competent directors of their own healing and development process in the latter quarter of this twentieth century, able to anticipate and respond creatively to hitherto unimagined future, a great learning enterprise is required. This learning enterprise would have to systematically educate human beings from the time they are in their mother's womb until the time they pass out of this world.

4. The well-being of the individual is inseparable from the integral health of the social and cultural context out of which that individual comes. Individual healing and the healing of the entire community must go hand in hand.

It is interesting to note that these four principles were not articulated like some political declaration for all the world to hear by the elders and others present at the conference. The talk continued for ten to twelve hours a day for three days and ranged from biographical and historical accounts of life in native communities since the coming of the white man to fundamental principles underlying the native spiritual perspective on the universe, the nature of human nature, and the processes of human development.

Using a method of text analysis similar to that described in Part Three of this thesis (the Lac La Martre Dene Values Project)[8], the four basic strategic principles, as well as a collection of what project staff have come to term "first principles" elucidating the native cultural perspective on the order and functioning of the universe and the process of human transformation (see Appendix C) were articulated.[9]

Then, during the next six to eight months, through over a hundred mini-conferences and workshops, as well as many late night meetings, lengthy telephone conversations and exchanges of correspondence, we were able to verify that we had managed to articulate what the elders, spiritual leaders and native professionals had intended to say, and that in fact we had succeeded in holding a mirror to the native communities, enabling them to look deeply into the core of their own culture.

It is interesting too, that native people from many different tribes and communities in Canada and the United States were involved in this process.[10] One of the principal struggles for project staff was, and continues to be, to find a universal language (one that does not clash with particular expressions of those universals) to express principles common to all (or most) native people. Around these universals, it was felt, each community could address its particular problems and develop its particular potentialities.

The educational value (for project staff and the communities) of such an enterprise has proven to be enormous. For here was a beginning point for articulating a vision of human possibility to set before developing communities that was truly a mirror of their own potentialities and their own wisdom.

The process of curriculum making, that is of constituting guided interactions with the universe to promote the unfolding of human potential, had been underway in native societies for centuries through the medium of ceremonies, stories, the custom of honoring and turning for guidance to wise elders, as well as through the sharing of the practical tasks of everyday life (such as bush navigation or food preparation). This organic curriculum process had been somewhat interrupted as people moved onto reserves and increasingly lost touch with the spiritual core of their own culture.

By the initiation of a discourse on the possibility of transformation, the Four Worlds Project has, in a sense, re-activated and revitalized a dormant process of organic curriculum within the native communities involved with the project.[11]

The first stage, then, in any authentic curriculum process, is the initiation of a discourse in a community of learners leading to the articulation of a vision of human possibility. This discourse (essentially dialogical in nature) will tend to revive the organic curricular processes latent in the culture, and will as well begin to identify appropriate entry points into transformational action.

In other words, the deliberation will eventually lead from the dimension of observation and reflection on the life world to specific starting points for action intended to transform some aspect of that world.

The ultimate practicality of developing and cultivating a penetrating discourse leading to the articulation of a vision cannot be overstressed. The Four Worlds Project dedicated a greater part of a full year (1983-1984) conducting over one hundred workshops in communities to this process. It is the fountainhead of development learning. From it flows not only the concrete plans for action, but as well, the interpretive frame that assists participants to make sense of what is happening to them as their world begins to shift and change.

The Alexander Evaluation

The process employed to conduct the educational evaluation on Alexander Reserve[12] was similar to that advocated by participatory research literature, itself inspired by the earlier action research model developed by Kurt Lewin. The entire process was owned and controlled by the local community. By "owned" I mean that it was their evaluation of their own community education system. They initiated it, decided on who would assist them, participated fully in evaluating the data collected and evolved their own analysis of what the state of affairs was, and what action they would take to address the problem.

For the people of Alexander, the process of conducting evaluation research was highly educative. The community learned a great deal about itself, its history, its problems, and its potentialities. For example, when parents and relatives of school-age children administered (after proper training) a standard hearing threshold test, they learned that, even using a relaxed standard, forty-five percent of the children tested were hearing impaired. This handicap, they learned through deliberations with university participants in the evaluation process, can be detrimental to the development of normal speeech and language skills. As well it can constitute an obstacle to normal learning in school.

This led to a great deal of community self-examination concerning such issues as diet, infant feeding practices, infant maternal care, infant stimulation, and the use of alcohol, especially during pregnancy.

Out of this one finding came a host of discoveries, which, when integrated into the larger process of educational transformation, have already deeply affected the lives of many people on Alexander Reserve.

As a result of the evaluation process, community members decided to take over their school, feeling that they could do no worse for their children than Indian Affairs had done. There had not been a high school graduate from Alexander Reserve in fifteen years. Their children had tested out to be two to five years below grade level when compared to the cross-Canada averages (Canadian Test of Basic Skills CTBS). There was a dropout rate that exceeded ninety-five percent. The school had always been plagued with a high degree of vandalism. In short, Alexander School was failing to educate the people of Alexander. Sadly, this story is repeated in most native communities in Canada.

Having determined that their school was not working, the education board, with the help of the university team, conducted a review of a variety of alternative models of education. Waldorf, Montessori, and Anisa systems were looked at the most seriously. Because of its compatibility with the wholistic native cultural perspective, the community elected to implement the Anisa model.[13]

After two years of local control, the Kapothakaw Education Center has become a model of alternative education known throughout the world. Not only have the school staff had to limit the flow of visitors (coming from native communities and universities as far away as the Sorbonne) but they have had to learn how to creatively work with parents, elders and interested community members who increasingly spend a great deal of time in the school during regular school hours.

In the past, it was difficult to raise enough interest in the community to hold any kind of home and school gathering. Now the awards nights at the school draw a crowd of as many as five hundred people.

In the spring of 1984, the Alexander Project was selected as one of the most outstanding community development projects in Alberta, and was asked to represent Canada at an international symposium on rural development held in Delhi, India.

The Four Worlds Development Project will continue to work with the Alexander community, assisting in developing further aspects of the program. The next phase, according to Alexander's own five-year plan, includes the development of an infant stimulation and parenting education program, a women's development program, a youth recovery program, and training for economic development.

Alexander Reserve was, some five years ago, considered one of the most disadvantaged reserves in Alberta. It had no money, and was considered to be a social catastrophe because of alcohol and drug abuse, and a host of other social pathologies. Alexander still has many problems. But they also have a vision of transformation, and they have succeeded in transforming a great deal in their community, and in themselves.

While further research is needed to develop a taxonomy of learning that has occurred in and through the process of community evaluation and educational development through projects like Alexander, it is certain that from the Alexander experience, as well as through similar processes elsewhere, the Four Worlds Development Project staff learned of several other critical ingredients in the making of authentic (development promoting) curriculum.

First, that the process of action research constitutes a guided interaction with many aspects of a people's life world, and as such, is in and of itself, a curriculum process so long as it is informed by a vision of possibility.

Second, that as people struggle together to transform some aspect of their world, their relationship with one another changes. In other words, the structures of social interaction are transformed. If that transition period is informed by a life-enhancing, development-promoting vision, it is possible to transcend previously insurmountable social and political obstacles to unity, which is a sine quo non, an essential prerequisite for collective transformation. An example of this phenomenon in operation is the Sarvodaya self-help movement in Sri Lanka, which has mobilized millions of people of a variety of classes, castes, religious and cultural backgrounds to work together for development (See Macey 1983).

Third, that as the rhetoric of mutuality between "educators" and their clients becomes an aspect of the consciousness of a community of learners, the "educators" become more and more incidental and even peripheral to reflection and observation activities leading to key decision making about the learning process. A successful development curriculum process (i.e. a process that generates learning for development) is owned and operated by the learners.

Fourth, that the community itself must select the appropriate entry point(s) into the process of development. It is so easy for trained "experts" to prescribe solutions (however indirectly). People who are quite used to accepting the definition of their problems provided by technocrats will often readily agree to an analysis that is far from penetrating, even though they sense intuitively that the analysis is wrong.

Fifth, that a core group of community people is needed to catch the vision of transformation, gradually transmit that vision to its fellow community members, and to lead the process of development on a day-to-day practical level. That core group becomes, in a sense, living curriculum material. They become a phenomenon with which others must interact, and through whom others are drawn into the process.

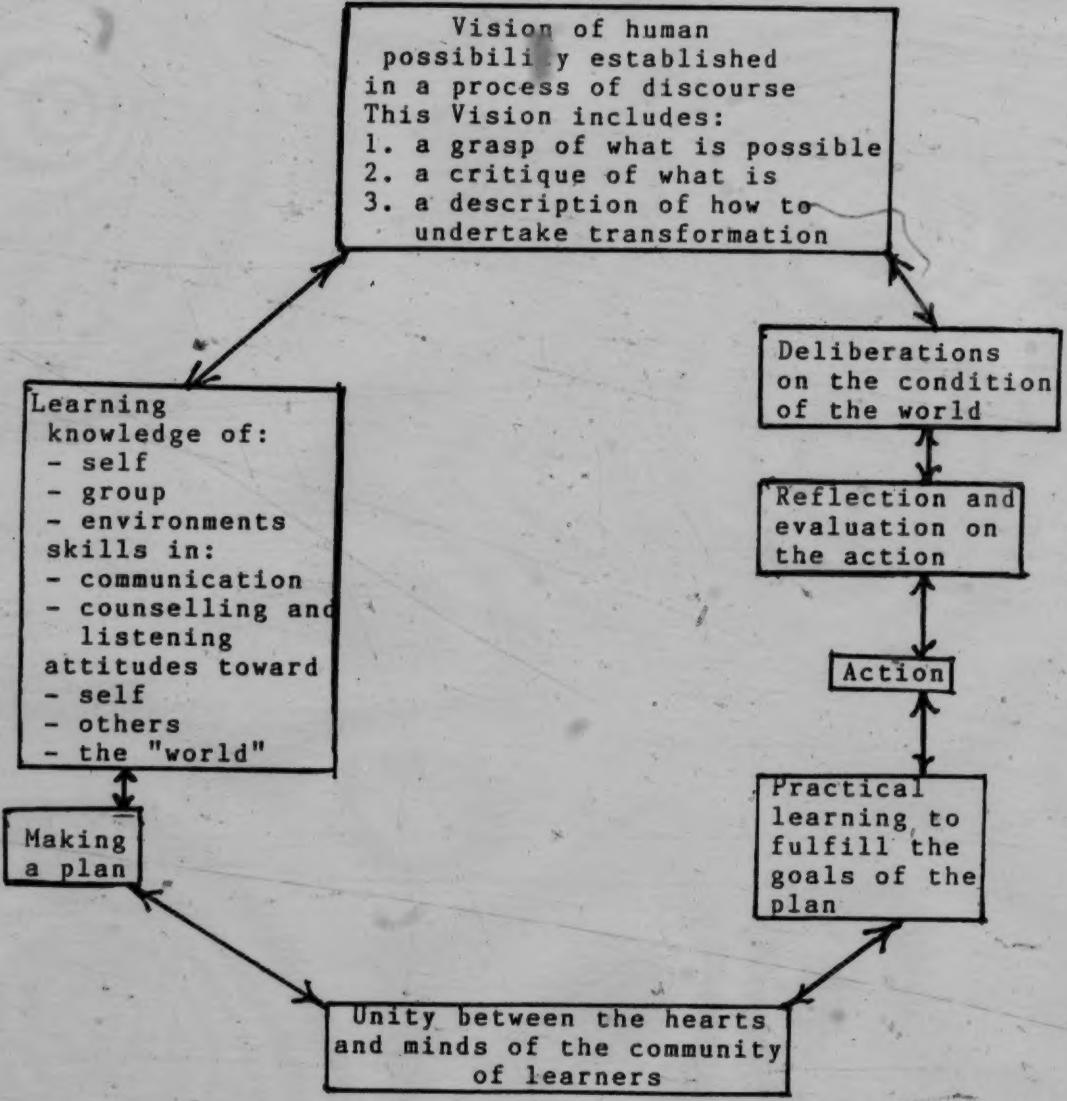
Sixth, that, as suggested above, there is an ongoing process of organic curriculum inherent in living culture. That process must be tapped and integrated with if an educational intervention is to promote human development. For human beings learn. That is a basic condition of what it is to be a human being. Further, human beings transcend current conditions and enter into new ones through a process of learning. This implies that contrived curriculum must, if it is to harmonize with the dominant learning themes of an individual or her culture (and it must if it is to be of use), root itself in the already ongoing curriculum process of the life world.

Following upon Kurt Lewin's model of action research as a cycle of action, reflection, planning and observation, Hayden Roberts developed a process model of community learning and development that has been very helpful to the Four Worlds Project in its efforts to conceptualize the community transformation processes (Roberts 1979:36). What follows (on the next page) is an adaptation of Roberts' model to describe the "moments" in an organic curriculum process for human development.

It is possible to enter the circle of development at any point. It is safe to assume that, in nearly all communities and in some form, this process is already underway. The problem for an educator is to discover and enter into it. It is precisely this strategy that has enabled the Four Worlds Project to work with many communities on a variety of activities, all conceived as transformational in nature by the participants. (See Appendix D for a description of activities of the Four Worlds Development Project 1983 - 1984.)

During the next several years, the Four Worlds Development Project will assist five successful native community programs to become regional training centers capable of providing assistance to communities similar to that now provided by the Four Worlds Project. Included in this plan is the goal of establishing university accredited training programs for educators, health professionals and other community level workers.

Figure 9: The Circle of Community Transformation


Vision of human possibility established in a process of discourse
This Vision includes:
1. a grasp of what is possible
2. a critique of what is
3. a description of how to undertake transformation
Deliberations on the condition of the world
Reflection and evaluation on the action
Action
Practical learning to fulfill the goals of the plan
Unity between the hearts and minds of the community of learners
Making a plan
Learning
knowledge of:
- self
- group
- environments
skills in:
- communication
- counselling and listening
attitudes toward
- self
- others
- the "world"

The Sacred Tree

During 1983 - 1984, the Four Worlds Development staff also responded to a clearly expressed need for curriculum materials to aid educators in teaching values to children in schools in culturally appropriate ways. This area is increasingly seen as a priority by native communities as they enter into a discourse leading to a renewed vision of human possibility. It becomes very clear that children need to grow into that discourse. The cycles of stories and ceremonies of traditional native societies, and the practice of a spiritually grounded life in service to one's community modelled by elders to younger generations has now been obscured in the world reconstituting processes of modernization. For some time people looked to the Christian churches to fill this curriculum need, but the churches (in most cases) have proven themselves unable to harmonize with the latent spirituality at the core of native culture. Today, as many as half the population of many native communities are under the age of twenty-five years. (This situation is repeated in many third world countries.) There has been a major breakdown in the enculturation process, and sadly, many children and young people have not had the benefit of even adequate parental guidance.

Alexander Band has recognized this and is setting out to interrupt this downward cycle through training and support for young women (women's support groups), and through infant stimulation and parenting education programs.

Still, the central task of the education of children is to assist them to learn how to live a life. Fundamental to that learning is the acquisition of sound values, moral practices, and as well, a grounding in the transformational character of human existence.

Two major curriculum initiatives were undertaken by the Four Worlds Project, in close collaboration with certain native elders and spiritual teachers. For elementary schools, a video series of traditional native legends which teach values was conceived, and the prototype produced, along with an extensive teacher's guide.

For adolescents, a full-semester program was prepared using the medicine wheel as a mirror to assist learners to look deeply into themselves, in order to see not what they are, but what they could be if their latent potential is developed. This program is called The Sacred Tree,[14] after the symbolic tree of life which appears in the stories of nearly all tribes to depict the source of wisdom and guidance in the heart of the people.

The Sacred Tree and accompanying Teacher's Guide to the Sacred Tree is not, it must be stressed, "a curriculum". It is material devised to aid educators in the making of that set of interactions with the various environments of the universe that will promote the unfolding of potential. Further, it is material particularily geared to promote the development of a vision of human possibility.

The activities of the program begin with an action research project to be conducted by the group of learners, inquiring into the nature, extent, consequences, and interrelated causes of alcohol and drug abuse in the community. As the research process is underway, reflection and observation on what is being learned and done is set into a dialogue with the learner's struggle to realize his own potential, and with the body of general cultural knowledge concerning the nature of human existence and the processes of human growth. It is this body of knowledge (which is known both theoretically and praxiologically in living culture) that is especially stressed in the materials developed for The Sacred Tree program.

Educators are encouraged to approach The Sacred Tree as a journey of growth and transformation; as a series of interrelated activities that will assist learners to "see" themselves and "the world" in new ways. In the introduction to the teacher's guide is written the following:

> There is little possibility that you, as a teacher, can successfully lead a group of young people through the sort of process we are proposing in this program without being touched by the process yourself. If we as educators are not prepared to grow and make changes in our own lives, how can we expect to inspire our students to explore possibilities within themselves? In many ways students will find the courage to feel deeply about what they will experience only if they see that kind of courage in the person who is guiding them through the experience.
>
> We therefore suggest that teachers reflect seriously on their lives before

> beginning the series; that they consider their own growing up years, their own mistakes, their own hopes for themselves, and the changes they have experienced. (The Sacred Tree Teacher's Guide, pp. 8-9)

The Sacred Tree represents one of the closest examples of a product that might be called "a curriculum" by those who do not conceive of curriculum as an organic process. And yet project staff are very careful to make clear to those who purchase the program that:

1. They have not purchased "a curriculum"; that the educator must still engage learners in a dialogue with "the world", and that engagement must itself be based on a relationship of love and respect between educators and learners.
2. The materials prepared by the Four Worlds Development Project are not complete; that they must be modified to suit local learners and the local cultural particularities that are expressions of the universals the program seeks to highlight.
3. The materials, as influences in the curriculum process, always play a secondary role to the interaction between educators, learners, and the world. The skill of a well-trained, sensitive, dedicated educator in inspiring and leading the learning process will be far more significant than the materials themselves. For this reason, the

Four Worlds Project offers workshops to assist educators to prepare themselves to lead the process suggested by the program. Where possible, a portion of this workshop includes direct work with the group of learners the educator intends to involve in The Sacred Tree process.

The Process of Developing the Sacred Tree: A Personal Window into the Workings of the Four Worlds Development Project

We suggested to teachers that there was little chance they could lead the Sacred Tree process without being personally affected by it. There was also little possibility that I, as one of the primary developers of the Sacred Tree program could expect that the process and context of its development would not have a profound effect on me as an educator and as a human being.

I had learned, during the course of my fieldwork, but largely through intuition, that my promotion of human development through education was grounded in a struggle within me to know myself and to understand what it is to be a human being in "the world".

The uncharted ground for me was the problem of how to engage others whose lives are rooted in a "world" other than my own in a meaningful dialogue about the nature of human nature, and about the process of ever-unfolding human potential. I knew from the first that I do not come to the dialogue (with any people) empty handed. My own personal and religious knowledge inherited from my culture, and discovered through a lifelong journey into faith, had taught me a great deal about the nature and process of being human.

As I struggled to find a way of bringing this intuited, internalized personal knowledge to articulation in the process of education, dimensions of this struggle were mirrored to me, either in the speech and actions of the people I worked with, or in the writings of what I have earlier called the transformationalists. This process of having mirrored to me that which I had only known tacitly and had found no previous occasion to objectify and articulate gradually showed itself to be of the utmost importance, not merely for what it revealed, but for the importance of the process itself.

I realized that a critical key to assisting a developing people to take responsibility for the process of their own development, and to articulate their own vision of human possibility was that somehow, aspects of their tacitly known "world" should be mirrored to them in an external and objective way. By mirroring back those aspects of the human process I have experienced to be fundamental (and hence universal) to human development (in that I have struggled with them in the course of my own development) it is often possible, I learned, to establish an empathetic connection with people whose reality is grounded in another "world" and to base a pedagogical process on that relationship.

The Four Worlds Development Project is, at this writing, immersed in a search for images, metaphors and other means of articulating human universals that will be comprehensible and meaningful to many different native communitites. The Sacred Tree has only been one small part of that larger process.

Yet, because it is a tangible product, let us consider it, not merely as a curriculum document, but also as a visible part of a larger process that is intended to be educative and promotive of genuine human growth.

Origins of the Sacred Tree Project

The Sacred Tree series was begun as an effort to prepare supplementary materials to accompany a two-part video series, "Where We've Been and Where We're Going" (also produced by the Four Worlds Project). That series discussed the personal side of native alcohol and drug abuse and suggested that one of the paths that has helped many native people to transcend alcohol or drug abuse is the traditional native spiritual teachings. The film shows brief cuts of sweat lodge preparations, hoop dancing, singing and drumming, as well as the testimony of many native people who have found their way out of a pattern of alcohol abuse by embracing some form of traditional native spirituality.

It was clear to us that many native people, and most especially the young, have very little knowledge about what the traditional native spiritual path is. This fact, coupled with the oft-repeated need expressed by native community people all across the country to find a way to teach values to young people in schools that a) did not offend anybody's religion, and b) was culturally appropriate in it perspective and manner of presentation, led us to an important decision.

It was decided, by the core staff of the Four Worlds Project during intense discussions on the fundamental nature of the process of human development, to produce a curriculum document that would stimulate dialogue about essential life values in native communities. In particular, it was felt that the document should lead out of itself into a process of personal growth and community transformation. This document, it was reasoned, and the process of its use in schools with the native community, could potentially function like a mirror held before the community that would enable individuals and even the community as an organism to look deeply within itself. This reflective process would, it was felt, need to accomplish two important educational goals. First, it would need to show what is strong and good and viable about the core of native culture. Second, it would need to stimulate the articulation of a horizon of human possibility in terms of personal and social development for native communities.

My Own Role; a Lesson in Humility

I spent a great deal of time listening to native elders, teachers and recognized spiritual leaders, trying to get a grasp of important themes and issues. I read insatiably. The more I talked, listened, read, and thought, the more inadequate I felt before the task. I did not know where to begin. Finally, I just plunged. I wrote furiously for many days. When I had completed a first draft, we held a team meeting.

Our project co-ordinator is Phil Lane, a Yankton Sioux with a profound knowledge of ceremonies and native spiritual teaching. He listened intently. I felt that what I had written was culturally correct and also true to my best understanding of human development processes. I also knew that I knew nothing about native culture as an insider knows things. That I would have to defer to Phil and the many elders and spiritual teachers he would consult about the document before it ever saw the light of day was obvious from the beginning.

The first draft generated the central devise of the Sacred Tree, that of taking students on a symbolic journey around the medicine wheel. Much of what I wrote is, in essence, present in the final document--but only in essence. It was very difficult for me to even understand the many objections, corrections, and new insertions that were prepared by the some two dozen commentators who reviewed my draft. As a writer and a scholar, I am used to a sense of my own competency. In this case, I knew myself to be utterly unable to complete the work without constant referral to others.

Yet, as difficult a process as it was for me (perhaps because of my own intellectual arrogance, or misplaced professionalism), my personal journey on the path of my own development stood me in good stead. I was able to find, in the metaphors, ceremonies, songs, stories and teachings of the many native elders whose influence is truly present in the work, universal themes about the nature of human existence and development that are truly present in the wisdom of many different native tribes. I could not hope to speak as a native person, much less as a spiritual elder. But because of the things I had discovered about my own humanness, through years of reading, praying, meditating, fasting, attending ceremonies and meetings, and reflecting on the process of my life, I was able to strike universal chords.

What happened is that I was able, to some degree at least, to put myself aside and to allow myself to be used like a craftsman's tool is used.

Gradually, the structure of my images began to change. They were no longer isolated snapshots assembled like a collage around my themes. They were instead moving. They would not stand still. And always they were rooted in the living earth--in nature. As well, the logic of my presentation shifted. At first the rhetorical form most commonly used in academics dominated the work. I had put an argument, and marshalled "evidence" to support it. But this too began to vaporize and assume a fluid heliptical form. There appeared cycle upon cycle of metaphor, always repeating itself, yet always novel, always expansive,always suggestive of still more to come. The hard edges of finality and "rigor" receded. I could no longer say that what was emerging was "my" creation. I felt as though there were many grandfathers standing behind me, and that somehow, I had "become their hands working".

This act of submerging my professional knowledge and personal capacities into a process that is directed by native people for their own self development delineates, I believe, the cutting edge of development education work. All of us on the Four Worlds Project staff have repeatedly submitted ourselves to this process.

Indeed, the project as a whole has always taken this stance in its relationship with the many local community projects it assists and supports. We become invisible. The community perceives (correctly) that it is they and not us, that are "doing it". Bearing in mind that one of the key objectives in the promotion of development learning is that the learners should take responsibility for their own development process, this "declaration of ownership" that has occurred with several of the communities associated with the Four Worlds Project signals that real progress is being made.

The Sacred Tree Process

The curriculum process suggested by the Sacred Tree material is much larger than the classroom. If what is suggested is able to develop, a core group of community young people committed to personal and community transformation will have been formed, and the beginnings of that journey will have been undertaken. The teacher is instructed to submerge herself in the process--to submit to being changed as well as to fostering change in others. She is urged to "involve other resource people" including "respected native leaders or professionals or staff members of native organizations" as well as community elders, parents, and anyone else who may be able to assist.

1. A Presenting Problem

Most human transformation processes begin with a presenting problem that is itself rooted in the entire context of life of that individual or community. In the case of the Sacred Tree, we selected what native communities across Canada have declared to be the number one health hazard and social problem facing native communities: alcohol and drug abuse.

2. A Participatory Research Process

Then, through a community-wide inquiry based methodologically on the principles of participatory research, students initiate a dialogue with many different individuals, groups and agencies in the community to determine the nature, extent, costs and consequences of alcohol and drug abuse.

During this process students are guided to see the connection between alcohol and drug abuse and other aspects of life such as the economic condition of the community, the cultural history, decline of traditional values, the generation gap,television, family breakdown, a failing education system, etc.

3. The Personalization of the Learning Process

We realized that it was highly likely that students would have strong feelings about what they, together with their community counterparts, would learn about themselves and life in their community. The expression of strong feelings, either through the medium of art or more directly in small supportive groups is an integral part of the Sacred Tree process. All too often, the ripping aside of layers of rationalization that enable people to merely cope, to get on with life is depersonalized and academicized. The consequence of this sterilization of the emotional nature of human beings is that the individuals actually living the process are not able to make an emotional committment to a new vision because they are stuck in an old one.

4. Introducing the Concepts or "Categories" of Transformation

Since the goal of the Sacred Tree learning process is to promote self-directed human growth, it is vital that learners acquire some tools to assist them in that praxiological (i.e. action/reflection) process. The role of vision in the human transformation process is primarily the presentation of an alternative category(s) of being into which a developing person may enter. If the category is not clearly articulated, visualized, and connected (by emotional bonds of attraction) to the inner life of a person or a people, transformation into that category is not likely to occur.

The Sacred Tree introduces a series of key concepts that are important dimensions of human development. For example, the concept of "growth or change" in human beings in introduced. Many people have never considered the possibility that human beings continue to grow, change and develop all of their lives. This simple concept, when introduced in over one hundred workshops held in 1983 - 1984 by the Four Worlds Project staff in native communities across Canada was new information to many people, despite the fact that the concept is central to traditional native values. That whole communities grow and develop was, for many people, a revolutionary idea. The concept that "volition", and its counterpart in human collectives, "participation", are at the center of human transformation processes was truly liberating to many people.

One workshop participant compared how she felt to sitting in a very large darkened room with no sense of where the edges of the room were. As various concepts were introduced to her, she said it was as though someone illuminated other parts of the room that she had never seen before. At first the edges of her world lay at the borders of the circle of light given by the candle. Nothing moved or changed. Suddenly there was a whole world of possibility before her.

5. An Integrating Framework

The next phase in the Sacred Tree process, after introducing categories of human potential, was to show how these may be integrated in the life of an individual or community and set into motion in a process of development. Students will have already seen, through films and guest speakers that this had occured in the lives of some individuals. It will then be timely to provide an integrating framework that could serve both as a metaphor for the process of development and as a mirror to reflect the horizon of what is possible.

The Sacred Tree as a metaphor exists in the stories and graphic representations of many native tribes in North and South America. The medicine wheel is also a fairly universal abstraction of the teachings surrounding the Sacred Tree symbol. By combining these two symbols in a process of self-discovery that was directed simultaneously to individuals and their community, the Sacred Tree program makes a connection with the organic curriculum latent in native cultures across the continent. For it was always through metaphors drawn from the world of nature, and from stories and ceremonies guided by wise elders that people learned how to live their lives, and communities and whole nations received visions of what they must do and what they could become.

Knowing this process to be very much alive in contemporary native communities (though sometimes tacitly lived and often embedded in language, in the silent spaces between speech, in the rhythms of social interaction in the intensely personal and intimate exchanges between lovers, between mothers and their children and between people and their Creator) the Four Worlds Development Project team sought, through the text and the process suggested by the Sacred Tree program, to bring to articulated and shared consciousness a way of living life that would foster authentic human growth and well-being. It is a path that was always known, but that had become obscured by historical circumstances. It is a path that is universal, yet one that is known only through the eyes of a particular "world" view.

By describing the path in terms that are familiar to most native cultures, but are the exclusive articulation of none, the Sacred Tree series has managed to strike chords of commonality and to elicit the approval and support of elders, spiritual leaders, and ordinary community people from many different tribes, including Blackfoot, Lakota, Dakota, Cree, Dogrib, Chipewayan, Okanagan, Mohawk and Ojibway.

The Design of the Text

The text of the Sacred Tree was designed to facilitate reflection on the categories of human well-being and development from two simultaneous perspectives. These are the analytical description of the process or quality, and the intuitive and emotional response to understanding the idea presented in connection with one's own life. To facilitate this two-pronged approach, great care was taken to develop artwork for the series that could capture the imagination and the emotions of students. Pages are laid out with small blocks of print and a great deal of white space leading the eye from the print into a picture that will prompt a visual processing of the ideas presented. This was done partially to accommodate the visually oriented cognitive processing styles of many native people, but also to engage the creative imagination of students, so that the direction of their learning focus would be continually expanded beyond the text, the course, or the school, and into life itself.

Beyond the Text

To this writing, the Sacred Tree series is being used or is about to be used in six different native communities in Canada and the U.S. As the series has only been available for two months, and is only now becoming known to many communities, it is anticipated that this number will be increased greatly within a very short time. The Four Worlds Project makes it very clear that the series will have to be adapted to each local cultural and community context, that it cannot be applied without reference to the local expressions of the universals it proports to highlight. To this end each class set of the Sacred Tree comes with a free orientation workshop. The goal of that workshop is primarily to insure that the elders, parents and community leaders are involved in adapting the Sacred Tree program to local conditions.

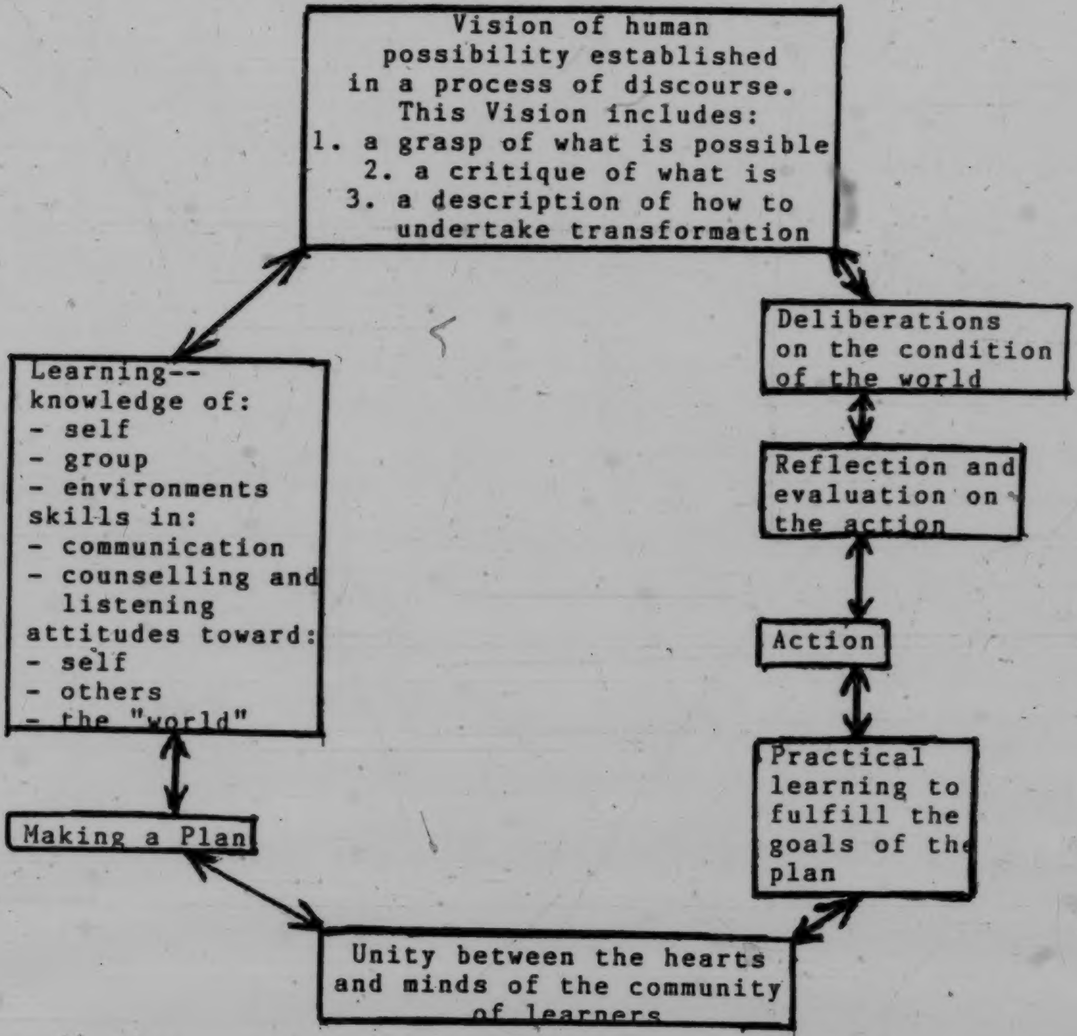
This workshop provides the occasion for a dialogue on native culture and the local expression of values essential to live life. Whether or not the anticipated outcomes will indeed occur has not yet been determined in practice. Our intention was that the process of dialogue surrounding the Sacred Tree program would lead, in many cases to a community wide re-articulation of vision, and of development goals and objectives.

Perspective

The Sacred Tree program is one of many initiatives being taken by the Four Worlds Development Project to stimulate and nourish a process of human development in native communities. The Sacred Tree is contributive, it is felt, to the full circle of human development (both individual and collective).

It will be useful to consider again the wheel of development, which is intended to depict the process of transformation and the role of curriculum in that process without reducing it to a stage theory or a recipe.

Figure 10: Moments in an Organic Curriculum Process for Human Development


Vision of human possibility established in a process of discourse. This Vision includes:
1. a grasp of what is possible
2. a critique of what is
3. a description of how to undertake transformation
Deliberations on the condition of the world
Reflection and evaluation on the action
Action
Practical learning to fulfill the goals of the plan
Unity between the hearts and minds of the community of learners
Making a Plan
Learning--knowledge of:
- self
- group
- environments
skills in:
- communication
- counselling and listening
attitudes toward:
- self
- others
- the "world"

(Adapted and revised from Roberts 1979:36)

Through the introduction and development of the Sacred Tree process in communities, an occasion is created to enter the circle of development and to stimulate movement in most, if not all, of the areas on the wheel.

The Role of "Outsiders"

The Four Worlds Development Project is a tertiary level development agency based at a university campus. The primary level of development work is the reflection and actions of the people themselves. The secondary level refers to local agencies and institutions arising out of the people. A tertiary level development agency is a thrice removed agent attempting to stimulate and support growth on the other two levels.

While the primary and secondary levels are the backbone of development processes, I have become convinced that the infusion of technical assistance and support (including financial), when it will allow itself to be led and guided by the primary and secondary levels, is essential to the process of learning for human development. No living organism grows without energy inputs from outside itself. But those inputs must be of the right kind, in the right proportions and introduced at the right time.

The knowledge of what a developing person or community needs, when they need it, from whom they can receive it, and how input from outside may best be made without disturbing delicate internal balances derives from three primary sources:

1) the dialogue between all partners in the development process (including outside agencies);
2) knowledge gleaned from the experience of other developing communities or individuals, i.e. development theory;
3) knowledge about the nature and potential of human beings, i.e. scientific and religious knowledge shared by everyone involved in the process.

Unfortunately, the training most educators and social scientists receive in the universities of industrialized countries tends to breed a self-protecting intellectual arrogance borne of the struggle to meet standards of "efficiency" and "rigor". The academic subculture is, as an institutionalized and legitimated gatekeeper, a servant of its own elite interest. From the bastions of knowledge in every profession the trumpets sound, signalling to the ordinary women and men that here and here alone may be found the authentic knowledge capable of achieving the healing of your body, the planning of your community, the soothing of your troubled soul, the designing of your bridges and buildings, the education of your children, and even the putting to rest of your last remains.

The control of skill is a lucrative business, and great care is taken to insure that what is now a highly priced service does not become (as it most probably once was) general knowledge shared and acted on by ordinary people (see Conchelos 1980). The goal of putting education and development expertise in the service of developing peoples is continually undermined from two sources.

First, from the individual self-perceptions of professionals, who believe that they have achieved some measure of knowledge, and are thereby entitled to professional respect and a level of remuneration equivalent to what other professionals receive. For me the money was never so alluring as being the one who "knows" and the one who controls in a professional situation. It has been a constant personal struggle for me to let go of that image of myself, because it has been that image that has guided me through a successful academic career. Yet, the extent to which I have been successful in becoming working partners with native people in the promotion of human development has been dependent on my ability to be led by others, and to use my knowledge and skills to serve their interests, and not my own.

Second, opposition comes from other professionals who, even at this writing, are attempting to undermine and discredit the Four Worlds Development Project both to its funding sources and to the native community. This same phenomenon occurs when a Canadian medical doctor refuses to extrabill despite the protestations of his or her colleagues. Such professional jealousy and self-protectionism is rampant among consultants working in the fields of education and human development, and among the personnel of large institutions such as universitites and government aid agencies. While I recognize and am grateful for the training I have received, I have had to struggle to turn my back on the "career interests" promoted by professional organizations and agency personnel, and instead to focus on the central activity of promoting human learning and development.

One device that has enabled me (and the other Four Worlds staff members) to do this has been the agreement, among us to limit our personal income to the salary we receive from working on the project, and to turn all extra monies (such as royalties and consulting fees) into a fund used to seed more development activities in native communities. This means that when I work with a native community organization, my entire attention is focused on the promotion of their human development. It also means that as community people realize the purity of motive that we are striving to attain in our relationship with them, a great deal of trust is forthcoming.

Paulo Freire spoke about the need to create a "new type of intellectual forged in the unity between practice and theory..." (Freire 1978:104). He said it was much easier to do this then to re-educate elitist intellectuals to the point where they would commit class suicide and truly align themselves with the people they were trained to serve. The Four Worlds Development Project serves, for me, as an arena of personal transformation and training. As the project itself develops, the individuals who work with it must align their aims and purposes to those of developing peoples. It would, I believe, be impossible to continue to work in the field of development education without submitting to this process. Eventually developing people recognize who is truly working with them, and who is "working them" for all they are worth.

Core Groups

A key feature of the Four Worlds approach to community transformation, and the individual growth that is generated through that process, is the formation of "core groups". A core group consists of a small (six to twenty-five people) group of community people, ideally representative of all the major family groups, political factions, interest groups, classes, cultural groups, and religions in the community. This representation is, it must be stressed, not of a political nature. Those who participate in core group activities must do so solely because they believe that working in unity with others on the task of transforming "the world" is an important, worthwhile thing to do and ultimately beneficial to themselves, as well as to the community.

The core group must be perceived (by the rest of the community) as an informal, nonaligned, nonpolitical (in the confrontational sense) group, more like an adult education class, a series of workshops or a personal support group than as another interest group in the community.

Over time, as participants carry on their discourse on the possibility of transformation, and the prospects for human development in that place, they will themselves be affected. This change in the participants' "world" will change their mode of participation in the various groups they unofficially represent.

Ilya Prigogine's theory of dissipative structures has been useful in assisting Four Worlds staff and the community people with whom they work in understanding the function of core groups in a collective human transformation processes.

A detailed presentation of Prigogine's work would far exceed the scope this discussion, as he is dealing with the ultimate evolutionary processes underlying the universe. Suffice it to say that the problem of entropy (the tendency of closed systems to break down) and evolution (the tendency of open systems to organize themselves into increasingly higher orders of complexity) seemed to be an unresolvable paradox within the same model of the universe until Prigogine advanced his nobel prize winning theory (awarded in 1977). (See Prigogine and Stengers 1984, as well as Prigogine et al. 1977 and Prigogine 1980.)

Greatly simplified, and applied to the process of social transformation, the theory may be restated as follows. Every system is organized around a core or nucleus that establishes the organizing pattern, which in turn dictates the fundamental structural form of the system. (A "system" here can mean a community, a culture, a nation, or even a traffic system in a city.)

The degree of complexity of any system may be understood in terms of two constituent components: 1) the number of units in a system (people, institutions, cars, etc.), and 2) the number of interactions between units in the system.

The organizing capacity of any system may be understood in terms of the degree of complexity a particular systemic structure is able to sustain without breaking down. (For example, some city traffic systems approach the point of complexity overload during rush hours.)

In order to sustain the life of any open system (all life systems are "open systems") energy is needed from outside the system. (For example, bio-organisms eat.) The more complex a system becomes, the more outside energy there is required to sustain the life of the system overall. But the more energy that enters a system from the outside, the more complex the system tends to become (more units, and/or more interactions between units). This vicious feedback loop continually escalates: more complexity demands more energy, which in turn produces even more complexity, which in turn demands more energy, etc.

Eventually, the core organizing pattern around which the system is structured is no longer capable of integrating the degree of complexity the system has reached. At this point the system begins to break down.

Sometime after this point of breakdown, a small, coherent nucleus eventually emerges that is capable of integrating all of the units of the old system (and more) in a higher order of complexity.

Hence, in social terms, a small coherent core group with a unified vision of possibility could, if their vision was capable of integrating the complexities of the life world as it had now evolved, form the nucleus for a new social pattern in a society that was experiencing massive socio-cultural breakdown as are many native communities (as well as many societies in the third world).

The entire theory of dissipative structures must be understood, in this context of a discussion on transformational curiculum, as a metaphor, and not as a representative model of social reality.

Yet, the Four Worlds Project promotes the development of core groups which will engage in discourse on the possibility of transformation, and conduct transformationally oriented action research on problematic aspects of "the world" anticipating that this group will, in some sense, establish new structural patterns around which the life of the community can organize itself--patterns that are more life-preserving, life-enhancing and development-promoting than those currently being lived out.

The core group, as it gains clarity of vision and coherency of action, will attract others to itself who will also participate in the learning-transformation process. The fundamental strategic problem is not whether core groups can have such an influence. That they can is an established fact in a wide variety of case studies on social change.[15] The challenge is twofold. The first problem is to tease out of obscurity and isolation in any community of learners those individuals who are in some way already facilitators of the organic curriculum process in the community. The second task is to unite the hearts of these individuals in a common vision of human possibility that transcends social and political barriers to collaboration.

The Four Worlds Development Project has prepared a series of nine discussion papers written to spark core group dialogue on aspects of community life and the possibility of transformation. At this writing the field testing of these materials, and the development of functioning core groups in many communities remains an immediate objective of the Four Worlds Project. During 1984 - 1985, seven communities will work on the development of this aspect of the curriculum of transformation in a concentrated way with the support of the Four Worlds Project.

Summary

The Four Worlds Development Project was highlighted as an example of a conscious attempt to promote human development (individual and collective) through education. As a project it is still very young, and has much to learn, both from the communities it serves and from other successful enterprises. It was highlighted here to flesh out principles guiding the generation of an authentic curriculum process (one that promotes human development).

The major principles emerging from this discussion of the nature of an authentic curriculum process may be summarized as follows:

1. Curriculum is a process, and not a document or a theory, or any other reified formulation of life world processes.
2. The curriculum process is fundamentally one of interaction between learners, and the constellation of environments we call "the universe". Participants in the interaction include the learners, educators, the community (parents, education boards, etc.), an education plan, and some aspect of the life world.

3. Curriculum is the process of interaction with "the world" that generates positive learning. Positive learning is development promoting.
4. The process of developing curriculum is the process of guiding the interaction between learners and "the world".
5. Authentic curriculum is praxiologically grounded, and as such, is fundamentally a creative process. This implies that the outcomes are not immutably pre-ordained.
6. The process of curriculum changes "the world" of the educator as much as that of the learner. It is a mutualistic process.
7. Curriculum conceived as a platonic ideal to be realized in the real world through the process of implementation is not, as such, authentic curriculum.
8. The process of curriculum is comparable to that of a conversation (cf Gadamer). It is open ended, and all participants are led by the process. There is no place for technocratic manipulation in a true curriculum process.
9. The curriculum process is comparable to the process of action research, with its cycle of "moments" that include action, reflection, planning and observation. Theory and practice are

inseparable and interactive. The entire process is practical in that it occurs as the practice of knowing subjects in and upon "the world".

10. The first stage in any curriculum process is the initiation of a discourse in a community of learners leading to the articulation of a vision of human possibility. The structure of this discourse is inherently dialogical.
11. The discourse eventually becomes deliberation on problematic aspects of the life world, informed by a vision of the possibility of transformation.
12. The process of action research constitutes, in and of itself, a guided (by facilitators) interaction with many aspects of a people's life world, and as such is a curriculum process.
13. When people struggle together to transform some concrete aspect of "the world", and when that struggle is informed by a vision of transformational possibility, their relationship with one another changes, i.e. the structure of social interactions are transformed. Hitherto insurmountable barriers to unity of action are transcended. Hence the process of curriculum is itself productive of the prerequisites for collective transformation.
14. An authentic curriculum process is owned and

operated by the learners. An educator can become incidental or even peripheral to the reflection and observational activity leading to key decision making about the learning process.

15. Learners themselves (and not the educators) must select the key entry points (i.e. aspects of the world to be transformed) into a curriculum process.
16. In collective transformation processes, a core group is needed to function as a nucleus of transformation, around which others may gather. The development and cultivation of this core group is analogous to the development of living curriculum materials.
17. There is an (ongoing) organic curriculum process inherent in all living cultures which encourages and guides human interaction with the universe in ways that promote the unfolding of human potential. Hence contrived curriculum must root itself in the process of this already ongoing organic curriculum process.
18. The engagement with "the world" called curriculum when guided by educators, must be grounded in a relationship of love and respect between educators and learners.
19. Prepared curriculum materials (documents) are not

curriculum, and are not complete, however polished they may be. They still must be modified to suit local learners and the local social and cultural particularities that are expressions of the universals the program intends to highlight.

20. Materials, as influences in the curriculum process always play a secondary role to the skill of a well-trained, sensitive, dedicated educator capable of inspiring and leading an authentic learning process.

The problem with any summary is that it abstracts concrete processes from life, and yet leaves one with the impression that they now have gleaned "the essence" of the process when in fact essence is precisely what they have not gleaned.

This essence of the curriculum process may be encountered in the following fictious anecdote written as a composite embodiment of the themes dealt with in Part Five of this thesis.

Waiting

I can still remember her eyes. They were small. You could tell she was mad, even though she mostly smile on the outside. "Good morning, Philip." Sixty-four eyes all look at me. I look at the clock. It say twenty minutes to ten.

I sure feel like crawlen into the cracks between the floor boards when she ask me to "tell the class why you are late again, Philip". I was nine years old.

I mumbled something about not waken up in time which was a lie. I had been halfway to Granny McLeod's house by the time the sun came up at 6:30. I remember the steam risen off the spring river that morning and drops of dew shinen in the sun like them rhinestone rosaries from church draped on the bushes. The leaves weren't out yet but they were gunna come soon.

Granny McLeod was old. Older than the oldest person on the reserve. She could remember when they build the school. Her face was brown and cracked like the earth down by the salt flats in July. Granny could talk to me with her eyes, which was always shiny. One time she told me about her uncle, who was a famous medicine man in the old days. And she told me what a boy had to learn to become a man. Then she asked me did I want to learn. I sure did. She said I should come see her every morning before school and she would teach me.

So every day I got up when it was still pretty dark outside. Granny taught me to go down to the creek and wash myself all over when I first get up. Somedays there would be thin sheets of ice over the slow water. I had to break it up. I would pour water on myself with the old kettle. Boy it was sure cold to do that, but I done it.

Granny said one of the most important thing a man's gotta learn is to be like little mouse sister. I remember laughen when she told me that, but when I looked at Granny she wasn't laughen. So I got real serious and listened. Granny just looked at me for a long time. I could feel her eyes burnen me but I couldn't look at her.

I waited and waited but she still didn't say nothing. I sure wished she'd start talken. Finally she did.

> Once upon a time, a long time ago, the Great Wolf stood alone in a beautiful golden meadow. He was crying.
>
> A short distance away, Little Mouse Sister poked her head up out of the ground to see who was making all the noise. She looked around and saw that it was the Great Wolf. It made her sad to see the Great Wolf so unhappy.
>
> Small and unimportant as she was, she wanted to help--she had been taught that way. So she walked up to him and spoke.
>
> "Great Wolf brother, why are you crying?"
>
> "Because I've lost my eyes and can't see. Who are you?" the Great Wolf said.
>
> Little Mouse Sister hopped up on the Great Wolf's nose to get a better look and saw that it was true. The Great Wolf was blind.
>
> "I am your little Mouse Sister. Why did you lose your eyes?"
>
> "Because I was very foolish and very selfish, my eyes fell out and got lost," said the Wolf. "If only I could see, I'd never be selfish again."
>
> The Great Wolf began to cry again.

> After a long time the tiny mouse spoke. "Please don't be sad. I'll help you."
>
> When the Wolf heard this, he began to laugh.
>
> "A little mouse help the Great Wolf?"
>
> "Yes, I'll give you my eyes," she said.
>
> Then Little Mouse Sister reached in, took out her own eyes and put them where the Wolf's eyes had been.
>
> This surprised him so much that he jerked back his head and caused Little Mouse Sister to fall off into the grass.
>
> Now that he could see again, the Great Wolf forgot his little sister and began running, dancing and leaping into the air. He was so happy.
>
> Then he remembered the little mouse who had given him her eyes and he went looking for her. He found her in the same spot where she had landed when she'd fallen off his nose. As he saw her sitting there, so kind, so unafraid, tears began to flow from his new eyes, washing away the hardness he had long felt in his heart.[16]

"Tomorrow I'll tell more of the story", Granny said. "You better get goin or you be late for school."

As I was leavin Granny's house, I saw her woodpile and decided to split some wood for her before I go. Pretty soon I carried a big bunch of wood in the house for her and she smile on me and I go to school.

"Well, Philip, why are you late?", teacher say. I never said nothing. I just stare at my sneakers and wait.

Appendix A

Dene Lifeways

Who are the Dene?

The Dene (pronounced Dennay) are the Athapaskan-speaking aboriginal peoples of the Mackenzie River drainage area, a region which covers the entire western portion of the Northwest Territories below the treeline. The major subgroups are classified by ethnologists and historians according to language, and to a lesser extent by slight cultural variations as well as by traditional regions of occupancy (Helm et al. 1975). There are the Kutchin, or Loucheoux, and Hare in the northeast, the Kaska (also called Tselona or Nelson people) in the west and the southwest respectively, the Beaver in the south, the Slave (pronounced Slavey) in the central region north to the approximate latitude of the current settlement of Fort Providence, the Dogrib people in the northcentral region, the Bear Lake people around the region of Bear Lake, the Yellowknife people to the north and east, and the Chipewayan people who occupied a large area covering nearly the entire far eastern section of the Mackenzie drainage system.

These Dene of the Northwest Territories are linguistically and culturally of the same general heritage as are the Koyukon of Alaska and the Yukon Territory, the Tanana of Alaska and the Navaho and Apache of the southwest United

States, as well as of other groups in northern California and Oregon.

All of these people speak a language that is essentially Athapaskan. Linguist-ethnographers Peter Gardner and Jane Christian report:

> Most people can understand well over half of what is said by people coming from four hundred miles away or more, along the Mackenzie and its tributaries. As with intra-community individuals, each settlement is somewhat different from all others, but basic communication can still take place. (Gardner and Christian 1977:37)

How the Dene Lived

In identifying who the Dene are, it is important at the outset to realize that they are as much "one people" as are Frenchmen, Koreans or any other "people" now accorded sovereignty over their territory by the rest of the world. Speaking of ethnic boundaries between the various subgroups of Dene people, Christian and Gardner raised the question

> Whether...they even exist objectively, except as artificial constructs, like boundaries between colours; there are no marked discontinuities that would provide...social or linguistic boundaries. (Ibid:392)

When the first voyageurs and fur traders made contact with northern Dene people it was probably with Chipewayan who had journeyed to a Hudson Bay post on the west side of Hudson Bay in 1714 (Hearne 1958:113). By 1750 the Chipewayan were acting as middlemen in small-scale trading with Dogrib and Yellowknife peoples further inland.

The cultural pattern of the Dene at this time was that of a hunting and gathering people who exploited an extraordinarily harsh, but equally abundant natural larder. The earliest records we have describing how the Dene lived are those of earlier travellers, traders, and missionaries. The letters of George Keith and W.F. Wentzle to Roderick Mackenzie (in L.R. Mason 1889-1890) are rich in detail concerning the lifeways, customs and salient characteristics of the Dene. These and other early reports such as the journal of Father Emile Petitot (Petitot 1891) confirm the much later findings of ethnographers (J.R. Mason 1913, Honigmann 1946, 1949, 1954; Nelson 1973; and especially, Helm 1961, 1968, 1971, 1972, 1980; Helm and Lurie 1961; Helm et al 1975; and Asch 1972, 1974). All of these have studied Dene cultural patterns, economy, language and traditions and have attempted to reconstruct a picture of the lifeways as they were at the beginning of the contact period.

Mobility was the key to survival in the subarctic. For the Dene, the ability to move as the exigencies of the hunt demanded dictated a social structure that was somewhat fluid, individualistic and above all, portable. Living as they did solely from the fish, fowl and game they harvested from the land, there was no possibility whatsoever that the Dene could have congregated in villages and survived. The land simply could not have supported a human population density greater than that which the Dene permitted themselves.

June Helm describes three categories of socio-territorial groups in her study of the Dogrib Dene. Her analysis is precise and with minor variations can be applied to all of the Dene peoples in the Mackenzie area.[1] The three categories she identifies (Helm 1968:118) are:

1. the regional band;
2. the local band;
3. the task group.

She explains that in practice a person was always a member of some local band which figured in a cluster of local bands comprising a regional band. The task group is a temporary organization which lasts for the duration of some task for which the group was especially formed. For example, a caribou hunt may require the cooperation of eight to ten members of the local or regional band who will agree to work together because it is more efficient than working separately. The same individuals may or may not form a task group for the next hunt. Helm (1968:118-119) lists three major determinants of recruitment and membership for these various levels of Dene traditional social organization. These are:

1. the territorial range;
2. specific resources and resource locales within the range;

3. kinship.

These determinants fluctuated in their relative influence on band membership over time as various local and even regional bands formed, dissolved and flowed into one another. When these changes occurred it was because of such variables as intermarriage or fluctuation and migration of game populations, as well as natural or social catastrophes such as famine, epidemics or wars.

The Regional Band

The regional band consisted of from twelve to fifty or more nuclear families (mother, father, children, grandparents, and unmarried siblings). These people exploited the resources within a recognized range or territory and were known to themselves and regional groups as a "people". The territories were large enough to contain adequate resources to sustain a regional band for generations. Except for specific gatherings, such as the mid-summer fish camp assembly, the total membership of a regional band was rarely if ever physically together. "Most of the time," as Helm puts it, "physical co-presence and social communication is shifting, intermittent, and piecemeal. (Helm 1968: 121).

The Local Band

The primary Dene social unit was a local band. It was also the basic production unit of the Dene economy in that almost all harvesting (production) and utilization of resources took place on this level. The local band, sometimes called the family camp (Asch 1974), consisted of from two to twelve nuclear families including dependents. The average seems to have been around four families at the times of Helm's (1968) study but she speculates that these groups may have been typically smaller in earlier times, depending of course on the availability of resources. Like the regional band, the local band tended to concentrate its activities in a specific territory which was in fact a subterritory of the area traditionally exploited by the original band. Local bands were, however, free to range over the entire territory traditionally exploited by the regional band to which they belonged. There is considerable evidence to show that even the regional territories were approximations of how much land was needed to sustain the members of a particular regional band. There was no concept of ownership of land per se and generally speaking no serious attempt was made to prohibit overlapping in the usage of specific areas in the exploiting of specific local resources (e.g. a particularly productive fish lake).

Because of Dr. Helm's conscientiousness in attendance to empirical detail, her summary of Dene socio-territorial groups gives us a fairly clear picture of what Dene social organization was like at the time of contact with Euro-Canadian society.

When we undertake to explore the kinds of social problems which have arisen as the Dene have moved into established settlements (a process which only began in the late 1940s), and when we strive to find solutions to those problems which may at the same time assist the development of the Dene people, it is to this primary social skeleton, as well as to the values, language, traditions and customs of Dene culture that we must turn for clues as to how, and in which direction to proceed.

Lifeways

Dene lifeways were linked intimately and inexorably to economic practicalities. When one reflects on what is needed in order to survive in the subarctic, the list is short but every item is crucial: food, fire, shelter and clothing. Just prior to the coming of the whiteman, the Dene were utilizing technologies and methods that they had developed over at least 10,000 years of occupancy of that land; techniques that had enabled them to thrive generation after generation in that seemingly inhospitable country. Dene lifeways revolved around the most efficient exploitation of bush resources for a people whose relentless pursuit of food had not permitted them the luxury of settlement or the discovery of iron.

Winters were generally spent in local band encampments near the shores of larger lakes. There the dietary staples of fish and small game could be obtained in a more or less constant supply. The labour in these encampments, as with all Dene ventures, was organized along sex and age lines. The men hunted big game such as caribou, moose, muskox and bear. The primary methods of securing game were snaring with babiche (sinew), snares, deadfalls and other sorts of traps. Larger game was also hunted with bow and arrows, spears, and sometimes clubs. A favorite method was to attack larger game animals as they were crossing water or open country. Wentzle reports

> Modes of hunting are numerous. In the spring, when a crust is formed upon the snow, the Indians frequently run down the elk and caribou, which they fatigue so much that they often kill them with spears. In summer and winter they pursue them with dogs into snares...in the rutting season...the natives rub the shoulder of an elk against a tree, at the same time imitating the cry of an elk; this brings the animal quite close, when they are easily killed with bow and arrows.[2] (in L.R. Mason 1889:82)

The hunting of large game, especially caribou, was best accomplished in the cooperative task group. These all-male hunting parties were always formed for the fall and spring caribou hunts. Smaller task groups were formed as needed for a variety of other activities. The men also cut trees used for shelter construction, drying racks and other camp necessities. As well, they fashioned many of the tools needed in Dene survival activities. Clubs, spears, bows and arrows, canoes, snares, knives and axes, sleds and snowshoes provide a partial list of these.

The women were responsible for most of the manufacturing of useable products from harvested bush resources. They tanned the hides (an exceedingly arduous and time-consuming task) and made all the clothing including footwear, mitts and summer and winter costumes for men, women and children. They prepared all meat and fish to be cooked or dried, and gathered berries and herbs in season. As well, they gathered willow for nets, made babiche for snowshoes, snares and thread, gathered firewood and tended snares and traps close to camp. The women also birthed and for the most part raised the children, though in this latter responsibility they had considerable help from older girls.

It is probable that people moved about quite a bit during the winter in pursuit of game and that they returned to their base camp only when it was convenient to do so. During the pre-contact period winter travel was done on foot or with snowshoes. Gear was often transported by hand-pulled sleds. The draft dog was introduced to the north by Europeans. Before the dogteam era it was easier to bring people to game than to lug quantities of meat over miles of rough terrain (Asch 1977:45).

Helm explains that January and February were the hardest months for the people. She cites one informant who tells her:

> When it is real cold you cannot get close to caribou. The sound comes from a long distance. By the time you get close, the caribou are running away. (Helm 1972:14)

The fish are "not travelling" at this time either. They have sought refuge from the cold in the deepest parts of the lake beyond the reach of Dene nets.

March and April bring longer, warmer days. The game and fish "start travelling again" (Ibid.) and the caribou begin their spring migration to the barren land. April was called "snow blindness month" (today it is called Easter month) and was the time of preparation for the spring hunt for caribou and (in pre-contact days) to a much lesser extent the hunting of beaver and muskrats.

By May the ice is clearing from the smaller lakes and streams and the hunt was carried on with low draft canoes usually covered with moose hide or bark. Mid-summer (June - July) was a time of in-gathering at fish lakes. Large encampments of two hundred or more persons would catch and dry fish, but as well would exchange news, make or settle contracts, dance and sing, tell stories, arrange marriages, settle disputes and play amusing gambling games (such as the exciting bone game).

It is interesting to note that these gatherings were not structured in terms of the membership of particular local or even regional bands. There was considerable overlapping from year to year. Intermarriage was common. Contracts enlisting cooperation on various tasks such as the upcoming fall caribou hunt (August - September) were made.

It was not uncommon for an individual or even a whole family to decide at this time to join another local or regional band. There is little evidence that these gatherings had any centralized leadership. The only time they took on a serious and political nature was if there was threat of war.[3] This fluidity of social structure bounded by the clear operative principle of Dene unity is important to stress, because it serves to demonstrate that the Dene have always identified themselves as a people. These roots run so deep that it is virtually impossible to see the end of them.

Individual Autonomy, Egalitarianism and Other Cultural Traits

In 1913 J. Alden Mason, in the conclusion of his study of the Great Slave Lake Dene wrote:

> Individualism seems to be the keynote to the interpretation of this culture. The individual is bound by few taboos and coerced by no authority. (J.A. Mason 1946:43, originally 1913)

This perspective is confirmed in virtually every thorough ethnographic account of Dene cultural patterns including Honigmann (1946, 1949, 1954), Asch (1974), and especially Helm (1961, 1968, 1972). In Helm's "Lynx Point" study she states:

> minding one's own business is a cardinal principle in Slavey life. Percepts, aid, or warnings are seldom volunteered to others. Even one's chil- dren...are allowed to a great extent to govern their own lives. One almost never interferes with another's children ... In regard to adults, noninterfer- ence is the rule. Each person is his own boss. (Helm 1961:97)

At the end of their exceptionally detailed 1977 study of Dene linguistic and cultural traits, a study focusing specifically on the individual Dene thought and communication patterns, Christian and Gardner emphasize the central role played by individualism and self-reliance, "particularly in regard to behavior that can be construed as economic and political" (Christian and Gardner 1977:389).

They point out that the cultural norms for creating a leader dictate a selection method that is situational and supported by group concensus as opposed to the Euro-Canadian concept of institutional rule effected by means of a majority election. The whole idea of voting is utterly foreign to Dene culture. People do not traditionally rally in support behind a chief or "band council" (a southern white import to the north). Whether the majority favour a proposition or not has little or no influence on the individual Dene in terms of engaging in his or her support. All individuals have to be convinced one by one (Ibid:92).

This ethnographic data also sheds considerable light on the treaties the Dene allegedly signed in which "the said Indians do hereby cede, surrender and yield up to the government of the dominion of Canada...all their rights, titles and privileges whatsoever to the land..." (from the text to Treaty Eleven, reprinted in Fumoleau 1977:16) because the treaty commissioner asked the Dene to "name certain chiefs and headsmen who would be authorized on their behalf to conduct such negotiations and sign any treaty to be founded thereon..." (Treaty Eleven:Ibid).

Such "representation" was, and for the most part still is, utterly foreign to Dene thinking. This issue will be taken up in more detail in later sections as we examine the question of the treaties, and the issue of Dene government. For the present it is sufficient to state that ethnographic data reconstructing Dene lifeways and value systems have enormous bearing on any attempt to grapple with Dene development issues today because development is essentially a growth process out of one condition and into another.

Other Traits

The following is a list of Dene sociocultural patterns as observed by a variety of researchers including material drawn from my own fieldwork. The list is presented here in point form without discussion simply to give readers largely unfamiliar with Dene some idea of what the face of Dene culture looks like, and to suggest what results can be expected from the interface of the Dene and Euro-Canadian culture.

1. Egalitarianism - a deep aversion to any one person acquiring economic or political advantage over the others;
2. Non-Interference - a behavior norm that dictates a "mind-your-own-business policy" in all but the most extreme of altercations;
3. Avoidance and Withdrawal - as a means of handling unpleasant persons or situations;
4. Non-Aggression - a marked aversion for aggressive behavior in oneself or in others;
5. Grievances Harboured - a tendency to harbour grievances rather than to confront others or to express those differences;
6. Indirectness or Obliqueness - in feeling out the attitudes and wishes of others (it is considered bad manners to ask another person to "lay their cards on the table");
7. Aloofness or Taciturnity - a marked lack of outward display of emotions; a tendency to be low-key, quiet and non-committal;

8. Pragmatic - a preference for the practical and the here and now; not overtly given to abstractions;
9. Noncritical Frankness - in expressing views on issues that affect the group in the context of serious discussion.

From June Helm's leadership studies (1956), "Lynx Point" study (1961), and Helm and Lurie's (1961) study of the Lac La Martre Dene, we can assemble at least a partial list of behaviours that are not approved of in Dene society. These include gossiping, lying, the fabrication of stories for self-aggrandizement, bossiness, overt manipulation of others, stealing, and perhaps the most serious of all, not being a hard worker, especially where the hunt is concerned.

Within traditional Dene society, noninterference was so highly valued that Wentzle was moved to report "as to forms of government, police and regulations, they have none" (See Mason 1889:89). Further research findings clearly contradict this view, however (Keith in Mason 1890:88, Helm 1956:138-140).

Social control was exercised by informal ostracism and then only in the most extreme of cases. Richardson reports in his travel journal dated 1847 and 1948 that among the Fort Franklin area Dene

> Order is maintained in the tribe solely by public opinion. It is no one's duty to repress immorality or breach of the laws of society which custom has

> established among them... A man's conduct must be bad indeed and threaten the gen- eral peace before he would be expelled from the society; no amount of idleness or selfishness entails such a punishment. (Richardson 1851 Vol. 2:56)

While more will be said on the issue of Dene traditional modes of government in a subsequent section, it is interesting to note that the principle of noninterference was so strong among the Dene that they did not concretize institutions of social control. If there was control to be exercised, the mechanism flowed out of the exigencies of a specific situation and dissolved again as the situation passed. The implications of this social fact are enormous at the point of interface between Euro-Canadian and Dene cultures in the framework of colonial intrusion.

This Appendix is taken from Bopp 1982:7-8, 14-28.

Appendix B

The Effect of Residential Schools on the Dene

The largest residential schools were located in Yellowknife and Inuvik and were built at the end of the 1950s. Four hundred to five hundred children attended each of these institutions. Somewhat smaller schools which existed for many years before 1960 operated at Fort Resolution, Fort Simpson, Fort Providence, Fort Smith and Hay River. It is useful to bear in mind the descriptions, given in Parts One and Two, of Dene traditional life-ways as we examine the main features of residential schools. Bear in mind also the intimate nature of traditional family organization, the country food, the hunt, the language--and then consider the following description.

Speaking no English, having never ridden in a car or truck, having never seen a two-storey building, having never eaten anything but meat, fish, bannock and perhaps the occasional sweet treat, young Dene children (aged six or seven) left the world of the caribou eaters and were catapulted into the technocratic universe of the white man.

The "great round-up" as it was called, began in August. Children of all ages boarded one of hundreds of twin otter planes that fanned out across the Territories to collect the school children.

Often the ride made the children sick. Then, after lay-overs and waits and a transfer to a larger plane at a staging area--Inuvik or Yellowknife! The school "with its throngs of people, its gigantic buildings, its stifling steam heat, its strange language, its unfamiliar food and its soft beds where one sleeps alone between white sheets" (Hobart 1965:2).

Children were then divided from siblings and friends according to age level, issued clothes and assigned a bed number. The supervisor (a native) spoke only English in order to force the children to learn. "No Loucheaux or Haire or Dogrib or Slavey is spoken here," they were told. Thus for as long as a year children were unable to express to anyone in authority what their basic needs were: loneliness, sickness, confusion, all had to be borne in lonely silence.

Aside from the heat, the communication vacuum, the trauma of sleeping alone, the strange food, the mammoth buildings, the sheer scale of social interaction (from a local group of perhaps thirty people, twenty of them children) and the meeting of traditional enemies (Eskimo) as fellow victims of the process--aside from all of this strangeness--the sheer regimentation and continual usurption of personal liberties and individual autonomy could not have been but a staggering shock to the new "student".

But little by little adjustments were made. English was learned (though often not too well) and the strange life became familiar and even pleasant. Then came summer vacation and for the student perhaps it was more traumatic to return to the life of his family than it had been to leave in the first place. Food seemed coarse and undigestible. Dwellings were "dirty" and "cold". Things seemed ill at ease between child and parents. Parents complained of "disobedience" and "disrespectfulness", of their children being "hard to manage", and worst of all, "the child no longer saw and performed without prompting the chores which needed to be done. Instead the child had to be told what to do" (Hobart 1965:Chapter 3:8).

That the children waited to be told is not surprising. It is difficult to imagine how a residential school with five hundred children could operate if children were permitted to do what they wanted whenever they felt moved to do so. There is a time for everything at the schools, and usually a bell rings to tell you when that time has arrived.

Dene camp life placed a large measure of responsibility on the child's shoulders. There were nets to be tended, dogs to be fed, wood to be cut and hauled, fish and meat to be prepared for drying, etc. The school life demanded very little in comparison and removed the burden of responsibility for the well-being of others from the child. At school he was no one's keeper, not even his own.

Parents complained of a loss of ability to speak the language of the family. Indeed, often after several years away at school, children found it very difficult to speak their mother tongue. Older students usually spoke English mixed with a Dene language to their peers and siblings. One researcher writing about the same phenomenon among the Cree in Quebec wrote:

> Parents often feel that children talk in English in order to prevent them from understanding what they are saying. Furthermore parents tend to associate the use of English with hostility because when children are angry they often yell at their parents or siblings in English. (Winthrob et al 1968:25)

Children, especially older children, tended to view vacations as relaxation periods and not a time to "work hard" as they had done all winter. Parents, on the other hand, felt that

> students have been "lazy" all winter and haven't done any real work while they (the parents) have had to cope with the ardours of life on the trapline. (Ibid.)

Naturally parents feel children should help the family with tasks like cooking, carying water and wood, and other chores. When pressured older students refused to "listen". Instead they "talked back" and in general tended to form their own adolescent subcultures "based on shared experiences at school" (Ibid:27).

Parents noted that frequent, violent arguments (very foreign to Dene culture) arose and that children seemed unconcerned about hurting others as well as unwilling to defer to elders. If we reflect on what the objectives were of those who planned and managed the residential school experience, these consequences are not at all surprising.

> The educational philosophy of the Educational Division of the Department of Northern Affairs and Natural Resources is based on the conception of a drastically changing Arctic and is catapulting children into educational situations designed to change their orientations, motivations, and skills with maximum rapidity. (Hobart 1965: Chapter 1:3)

In addition to the above we may add that this enterprise was conceived in the marriage of two assumptions: 1) Indian culture is not worth preserving. It is an outworn, useless, dying thing (Fumoleau 1977:150); and 2) the nature of man is to evolve (socially) to become cultural, social, political and economic replicas of Euro-Canadians.

What was most damaging for the Dene point of view, was that their children were taught that traditional values constitute obstacles to "progress and development"; that the individualistic achievement aspirations of southern Canadians are derived from a more "advanced" form of social organization; and that the political institutions and the economic assumptions of southern Canadians are infinitely superior to the primitive "anarchy" and pseudo-economy of the traditional Dene.

In Memmi's terms, Dene children are taught to internalize the colonizer's perception of Dene culture. This perception typically evokes an ethnocentric devaluation of the culture of the colonized peoples (Memmi 1965). Eventually, explains Martin Carnoy,

> the colonized accepts this caricature. All the institutions of society are shaped by the colonizer to fit his views of the colonized. Since the colonized is forced to function within those institutions, he begins to accept the colonizer's conception of him. If the colonized resists that image he is punished; if he is aggressive, refuses to work like an animal or to be an object, the colonizer's law is used to find him guilty. (Carnoy 1970:62)

A 1972 Northwest Territories Department of Education document (entitled "Elementary Education in the Northwest Territories") calling for radical changes in the approach taken toward native people in the schools has this to say about discipline in the school system:

> Disciplinary practices can take several forms as for example raised voice; cuffing the child; using a convenient book to arouse the unwary from suspected apathy or lethargy; outright corporal punishment via a strap or ruler; deprivation of rewards. With few exceptions the non-Native person accepts any or all of these forms of punishment as quite routine. "It is the way it is done." In the Native experience overt signs of anger and frustration...have little meaning. What may appear to the non-Native as being permissive on the part of the parents in actuality may be

> a subtle yet effective approach to child-rearing based on love and understanding of a deeper quality than is conventionally known in many Euro-Canadian households... (N.W.T. Department of Education 1972:8)

That Dene culture devalues aggressive confrontation and the usurption of the autonomy of the individual (even children) has been borne out, as we have already noted, in a wide range of ethnographic research (Helm 1961, 1968; Helm and Lourie 1961; Honigman 1946; Christian et al 1946, 1977).

The disorienting consequences for Dene children of spending the first (formative) six years of life being acculturated in traditional Dene patterns, and then being thrust into a foreign, brain-washing concentration camp style school experience cannot but have caused severe, and in many cases unalterable, damage to the child, to the family, and to the community he or she was eventually to return to.

The effect on Dene communities of seeing their children go through such a devastating experience cannot be overestimated. The very roots of Dene culture were being severed, or perhaps more accurately, the roots had been infected with a malignant bacteria that was soon to alter the entire organism that was Dene society.

This Appendix is taken from Bopp 1981:127-133.

Appendix C

The First Principles

The elders and their collaborators gathered in Lethbridge called us to the task of articulating the fundamental principles of existence, of human nature and purpose, and of human growth and well-being.

What follows is a distillation of their statements, as well as of statements made by native elders and teachers throughout the ages and handed down through stories and sayings that are a part of the great wealth of knowledge contained in native oral traditions. It is important to note that many of these principles have been re-stated in various ways by great spiritual teachers and thinkers of many cultures and traditions. In the context of the Four Worlds Project, we attempt to articulate them in ways that readily allow for their application in human development processes.[1]

First Principles

1. Wholeness: All things are interrelated. This connectedness derives from the reality that everything is a part of a single whole which is greater than the sum of its parts. Hence any given phenomenon can only be understood in terms of the wholeness out of which it comes.

2. Change: All of creation is engaged in a process of constant change. There are two general categories of change: development or integration, and disintegration. Both are necessary and inseparably linked.

3. Process: The course of change generally follows

observable patterns which occur in cycles or stages. There is a direction (an implied intentionality) to all change that leads to some outcome which can only be fully understood in relationship to the context within which the process is taking place.

4. All of creation may be understood in terms of two categories of existence: material reality and spiritual reality. These two categories of existence are functionally inseparable. Yet there are distinct laws and principles which govern each dimension.

5. Human beings exist in connection with all other aspects of creation.

6. Human beings are material and spiritual beings.

7. Human beings are in process of becoming (i.e. actualizing potentiality) from conception to eternity. This is true of individuals as well as human collectives such as the family and the community.

8. Human beings have the capacity to create further potentiality through the cummulative effects of learning and culture. Hence human potential may be regarded as infinite.

9. As human beings, we transcend the limitations of mere materiality be virtue of our ability to direct the process of our own becoming.

10. The spiritual dimensions of human development may be understood in terms of four related capacities:

    First, the capacity to formulate and/or to respond to non-material realities such as dreams, visions, ideals, spiritual teachings, aims, purposes, and theories.

    Second, the capacity to accept these realities as representations or manifestations of unknown human potential.

    Third, the capacity to give these non-material realities symbolic expression (through art, mathematics or language).

    Fourth, the capacity to use this symbolic expression to guide action that is aimed at translating potentiality into actuality.

11. Human spirituality is expressed and developed through the practice of life-preserving, life-enhancing values. (A value may be understood as a patterned use of human energy.) These values (we may also call them qualities or virtues) include honoring the Creator, honesty, love, wisdom, justice, courage, respect, courtesy and humility to name only a few. The realization of these values in human affairs is an indispensable component of human development.

12. The essence of human actualization is the process of coming to know and to love the ultimate unknowns underlying the ordering of the universe. This is an infinite process. It may be expressed by individuals as well as by human collectives.

This Appendix is taken from Overview, The Four Worlds Development Project, The University of Lethbridge

Appendix D

The Four Worlds Development Project: Summary of Activities 1983-1984

Curriculum Development

Curriculum materials have been developed for elementary schools, high schools and adult programs, focusing on the foundation of human development. These materials are extensive, covering blocks of time ranging from six weeks to a full school year and involving full colour and animated video productions.

Research

In a continued search for a contemporary re-articulation of native culture by native people, extensive work has been carried out with native elders to systematically collect, thematize, analyze and translate into principles for education and community development programs, the fundamental structure of meaning that is the foundation of native culture.

The Four Worlds Development Project has received considerable international attention and acclaim for its articulation of the dynamic role culture plays in human development.

We are continually searching for and developing new ways to unlock and channel this vital force in community health programs, educational transformation efforts, community development projects, and information gathering in the fields of alcohol and drug abuse prevention.

We have also conducted bonafide research in the fields of evaluation and curriculum. As well, we are now assisting and promoting research in community health monitoring techniques, infant nutrition, the ethnography of northern youth subculture, in the issue of participation in community development planning, and in the use of computers for remote learning and educational networking.

Alcohol and Drug Abuse Prevention Information Gathering

The Four Worlds Development Project has conducted an extensive literature review of alcohol and drug abuse prevention material and has assembled these materials at the University of Lethbridge. We have compiled an annotated bibliography of materials which will be updated annually as a part of a national information centre service we will provide.

Alcohol and Drug Abuse Prevention

The community-based, wholistic approach to alcohol and drug abuse promoted by the Four Worlds Development Project has caught the imagination of native leaders across the country, as has our related objective of "eliminating alcohol and drug abuse in native communities by the year 2000".

We have discovered a means of assisting communities to begin to address the alcohol and drug abuse problem by helping them to discover the connection between such problems as the nutrition of infants, the status of women, the role of elders, the economic condition of this community, and fundamentally, the loss of spiritual and cultural foundations to human development.

By participating in a community learning enterprise (pre- natal to eldership), the root causes of alcohol and drug abuse are transformed. To this end, we are now:

1. conducting workshops (100 in the past year);
2. assisting in community development planning;
3. conducting intensive training programs (particularly in the area of teacher training and wholistic youth development);
4. networking technical support for communities;
5. searching out and assisting in the securing of funds on behalf of communities;
6. developing special information and learning packages to assist communities to solve development related problems;
6. providing consultative and technical support to numerous school programs, alcohol and drug programs and community health programs across Canada. The support consists of many hours of telephone consultation, workshops, visits, and the preparation of specialinformation packages or concept papers, as well as trouble shooting activities. This support work will be further enhanced by computer linkages now being

established between the University of Lethbridge and native communities we work with.

Development and Training Centers

Five pilot communities across Canada will be selected this year, representing the range of environmental and social conditions in which native people live in Canada (from remote villages to urbanenclaves). Communities are being selected for their potential to evolve successful models of integrated human development which address the root causes of social pathologies in native communities (including alcohol and drug abuse).

We will work with these five (and another five to be added gradually over a four year period) bringing to bear the best scientific and technical assistance western universities can offer.

These projects will become regional training centers. They will be used as bases to do regionally what the Four Worlds Development Project is doing nationally, i.e. to promote and support human development efforts in native communities.

Wholistic Youth Development

Many native communities have a school dropout rate of above ninety percent. At the same time, over fifty percent of most native communities are young people, under the age of twenty-five.

The potential for disaster or triumph both rest within this group. A means of recovering as many as ninety percent of the native youth and assisting them to become dynamic participants in the development of their communities has been developed.

A center for this national program is being established at Blue Quills School in St. Paul, Alberta, to further develop the program, and to establish a university accrediated training program for teachers.

Networking

We have assembled a resource file of over 200 professionals with expertise in a wide range of fields that must be brought to bear on the challenge of human development in native communities. Scarcely a day passes without the need arising to connect one of these individuals or groups to some program or problem in a native community.

Accredited Training

There is a tremendous need for degree programs to train teachers, health workers, administrators and managers for native communities. This training must be rooted in the native cultural perspective. No university in Canada is now providing this service.

At the specific request of native communities, we are now developing a field-based approach to precisely this kind of training. The first courses will be offered during the 1984 summer session. We anticipate that a number of full degree programs will evolve.

Appendix E

A Summary Statement on the Anisa Model

The Anisa Model represents a comprehensive educational system functionally defined by specifications that insure its replicability, evaluation, and refinement. The specifications set forth educational objectives pertaining to the actualization of human potential and explanations of how to achieve them. These objectives and explanations are derived from a coherent body of theory that has been deductively generated from a philosophical base and inductively validated to whatever extent possible by findings from empirical research.

The Philosophy Underlying the Model:

Defines man as a spiritual as well as a material being;

Explains his reality in terms of the process of his becoming (actualization of potentiality) and recognizes that the concept of process presupposes both creativity and potentiality;

Proposes that, because of man's ability to create further potential (a form of transcendence) through the cumulative effects of learning and culture (a reflection of immanence), his potentiality be regarded as infinite;

Derives the explanation of the process of becoming from a general ontological principle of relativity (i.e. man's relatedness to all other entities in the universe and the impossibility of understanding any being apart from the circumstances in which it becomes);

Accepts the principle of hierarchical structuring as a primary expression of order and beauty in the universe;

Defines the basic order of the universe in terms of different hierarchically arranged ontological levels and places man at the apex of all living creatures;

Conceives of order as dynamic in nature (i.e. novelty perpetually emerges from new integration of prior entities) and upholds the thesis that man escapes the limitations of mere materiality by virtue of his ability to direct the process of his own becoming--patterning the use of energy available to him--by consciously entertaining the infinite range of possibilities (potentialities) open to him;

Identifies the process of becoming with an intrinsic pressure to know and to love that impels conscious speculation about, and attraction to, unknowns and ultimate unknowables (in themselves forms of potentialities) and man's relationship to them;

Defines man's spirituality as the conscious capacity 1) to formulate and/or respond to non-actual realities (ideals, aims, purposes, theories) as a consequence of such speculation and attraction; 2) to accept them (ideals or theories) as substitutes for or manifestations of the unknowns/unknowables; and 3) to give them symbolic expression that helps to guide or give direction to the translation of potentiality into actuality, thereby facilitating their functioning as final cause;

Accepts the realization of beauty as the teleology of the universe and equates the self-actualization of potentiality in service of beauty (knowing and loving the ultimate unknowns underlying the ordering of the universe) as the highest expression of that teleology.

The body of theory derived from the philosophy includes theories of development, curriculum, pedagogy, administration, and evaluation, each of which is briefly outlined below.

The Theory of Development:

Defines development as the translation of potentiality into actuality and equates that translation with creativity;

Describes the nature of human potential and recognizes the impossibility of establishing its finitude;

Establishes two broad categories of potentialities--biological and psychological;

Identifies proper nutrition as the essential element in the development of biological potentialities and learning as the key factor in the release of psychological potentialities;

Affirms the importance of early experience in shaping subsequent developmental phenomena and enunciates the heuristic value of the concepts of critical or sensitive periods, stages and sequences;

Stresses the importance of learning how to learn (learning competence) as the ultimate source of independence and confidence;

Defines learning competence as the conscious ability to differentiate aspects of experience, integrate them into novel patterns and generalize them to other situations, and sets forth the proposition that differentiation, integration and generalization constitute a trio of interrelated processes that define a developmental unity of change; i.e. stage, (sequences of stages being the primary means by which increasing complexity of function and structure is built up and integrated through hierarchical organization);

Establishes five categories of psychological potentialities--psychomotor, perceptual, cognitive, affective, and volitional;

Confirms interaction with the environment as the means by which development is sustained;

Accounts for the importance of the perpetual introduction of some novelty into the environment as a primary means of creating disequilibrium (or disparity) between developmental level and experience thereby compelling new patterns of interaction, which in turn facilitates the actualization of psychological potentialities;

Categorizes interactions in terms of their power to facilitate the development of learning competence and the maintenance of biological integrity;

Fixes three basic categories of environment) physical, human, and the unknown) consistent with the ontological levels outlined in the philosophy and establishes the Self (personal identity) as the microcosmic reflection of the three environments and the most constant part of the environment it experiences;

Explains the emergence of personal identity (character development) in terms of value formation and defines values as the relatively enduring structurings of actualized potentialities (patterned uses of energy available to the organism);

Explains how information about the environments, held as beliefs, affects the structuring;

Identifies three value sub-systems (material, social, and religious/aesthetic) each of which is associated with a category of the three basic environments;

Explains three analogous higher-order competencies (technological, moral and spiritual/philosophical) that rest on the value sub-systems;

Defines the structural and functional reality of personal identity--the Self--as the three value systems combined into an integrated totality upon which depends the personal effectance of the Self--"self-competence", analogously defined as the combination of the higher-order competencies;

Explicates the relationship between culture and personality formation, particularly as it is transmitted by parents and the family;

Provides a general scheme for understanding the nature of pathology and its etiology (both biological and psychological), sets forth the conditions for the prevention of mental illness, character disorders, delinquency, and criminality, and is generative of testable propositions concerning therapy and rehabilitation.

The Theory of Curriculum:

Defines cirriculum in terms of educational goals and what children do (with or without the assistance of teachers) to achieve them;

Fixes the overarching goal of education as the actualization of human potentialities and their structuring into identity around those ideals that guarantee survival and perpetually improve its quality;

Differentiates the main goal into process goals and content goals;

Identifies two categories of process goals: 1) development of biological potentialities (facilitation of normal maturational processes) and 2) actualization of psychological potentialities (psychomotor, perceptual, cognitive, affective, and volitional);

Specifies two categories of content goals analogous to the process goals: 1) requisites for physical health (proper nutrition, pure water, clean air, sunlight, optimum temperature, etc.) and 2) information about the world in which we live organized aroung the categories of the three basic environments (e.g. physical/botanical/zoological/anthropological, and theological/philosophical facts and/or beliefs and their applied counterparts, e.g. electronic engineering, agriculture, medicine, etc.) and information about the Self as an integrated microcosmic reflection of the other three environments;

Emphasizes the need for and means whereby process may be used to reduce error in the information (content) assimilated and how accumulated content may be applied to render process more efficient;

Accounts for the kinds of interactions a child must have with the different environments in order to achieve the process and content goals that result in an integrated Self characterized by values (patterned uses of energy--actualized potential) and related competencies that not only guarantee the continual release of potentialities but also improve the quality of survival;

Identifies three basic symbol systems that help to mediate or facilitate interaction with the three different basic environments and give direction to the structuring of actualizing potentiality: mathematics and symbolic logic, language (speech, reading, writing), the arts;

Indicates the role of evaluation in relating the degree of goal achievement to particular interactions prescribed, encouraged or permitted.

The Theory of Pedagogy

Defines teaching as arranging environments and guiding the child's interaction with them for the purpose of achieving the educational objectives specified by the curriculum;

Views educational facilities as a particular case of arranging an environment and establishes the process by which specifications for faciltities are derived from the total body of Anisa Theory;

Views educational facilities as a particular case of arranging an environment and establishes the process by which specifications for facilities are derived from the total body of Anisa Theory;

Affirms the necessity of individualizing instruction and provides the means for doing so by 1) establishing diagnostic and speculative methods for ascertaining the child's developmental status and setting forth related prescriptive and experimental approaches to arranging environments) so that children have several adults who know them well to assist them at any one time; 2) arranging for continuity of experience with several adult teachers over a three- or four-year period of time; and 3) by engaging more experienced children to teach less experienced children throughout the system, thereby exploiting the axiom that teaching consolidates learning.

The Theory of Administration:

Defines administration in terms of service qualified by the purposes and goals of the group or educational institution as specified in the theory of curriulum--a service that explicitly calls for administrators to have extensive knowledge about the goals and how they are to be achieved so that they can be both helpful and credible (and therefore not an embarassment as models);

Identifies two basic functions of administration that must remain in dynamic equilibrium: leadership and management--the former arising from dealing with the present in terms of future possibilities (an expression of transcendence) and the latter having roots in negotiating the present by organizing and coordinating the resources represented by past achievements, accumulated knowledge, and expertise (immanence as the heritage of the past);

Explicates the necessity for leadership and management to collaborate in the establishment of priorities, assessing needs, identifying resources, determining feasibility, and allocating resources to achieve objectives as efficiently as possible;

Provides the rationale for defining tasks to be achieved by the educational institution so that personnel may be recruited on a rational basis and the staff can be differentiated (matching talents, interests, abilities and skills with institutional needs) and integrated around purpose;

Explains how differentiation and integration of the staff around purpose functions as the primary means of releasing the institution's potentialities as a social organism;

Recognizes the unifying advantages of hierarchical adminstrative structures while guarding against their potential rigidities by establishing consultation as an indispensable procedure through which arbitrariness is removed from decision-making power by distributing it throughout the system at loci of authority legitimatized by expertise and knowledge;

Stresses the importance of information dissemination both horizontally and vertically and relates the rate of information flow to efficiency and morale;

Affirms the necessity for direct feedback on performance and endorses a circumscribed counselling function as an important element in performance evaluation;

Emphasizes the rational basis for institutional self-renewal by making the results of research and evaluation mandatory input to the decision-making process at any given level;

Affirms the importance of morale and defines it as: a pervasive willingness to comply with reasonable policy and to work cooperatively and make sacrifices when the system is under stress; a widespread conviction that everyone's energy is constructively utilized in the achievement of the shared purposes and ideals of the system--purposes and ideals that themselves relate to the perpetual release of the potentialities of the group as a social organism and that generate a climate of hope and opportunity for growth; satisfaction with the compensation received for efforts made; a sense of security that derives from trust that confidences will not be broken or injustices committed; and a sense of unity and belonging that derives from the acknowledgement and appreciation of contributions made;

Reflects the ontological principle of relativity in its emphasis on the participation of community and home so that the children are rescued from the fragmenting discontinuities and conflicting loyalties that impair the release of their potentialities.

The Theory of Evaluation:

Defines evaluation in terms of the purpose of the activity or program being evaluated;

Seeks to relate means to ends, distinguishing efficient from final causes;

Conceptualizes evaluation as an ongoing process that examines every aspect of program operation (including process and product or impact) and provides immediate feedback for its timely modification, including modification of the evaluation scheme itself;

Recognizes that data collected rarely speak for themselves, but require interpretation that takes into account 1) that probable accuracy and weight or significance of data as determined by the type of data, their source and the time and means of collection; and 2) the purpose for which the data and their interpretation is to be used (i.e., question of relevance);

Stresses the value of longitutdinal studies and cautions against the ready acceptance of short-term effects as proof of significant impact;

Designates comparatives analysis of children's interactions with particular environments and their developmental consequences as the focal point of inquiry;

Affirms the indispensability of recognizing internal states of the organism (such as subjective aim, intentions, memory) as causal influences on behavior;

Admits the ineffability of many vital aspects of human experience (thereby avoiding possible inadvertent biases proceeding from an unrecognized assumption that whatever is not measurable is not important);

Allies the purpose of evaluation with the heuristic, explanatory, and predictive functions of research and science;

Employs evaluation results as an important stimulus to the re-examination and refinement of the philosophy underlying the model and the body of theory upon which its operationalization depends.

This appendix is taken from Dr. Daniel Jordan's unpublished notes distributed in xerox form to his graduate classes at National University, near San Diego, California, shortly before his tragic death in the fall of 1983.

Footnotes

Introduction

[1] Snare Lake is one of the Dogrib Indian communities located in a two hundred mile oval encircling Yellowknife at the southern arc and running north to northeast. The Dogrib are categorized as an Athapascan-speaking people, along with the other Dene groups. Dogrib people are concentrated in Yellowknife, Detah, Fort Rae, Lac La Martre, Rae Lakes and Snare Lake.

Part One: The World

[1] The consequences of some of these efforts for human development will be examined in Parts III and IV of this thesis.

[2] See Bopp 1981.

[3] There were, before 1960, church-operated residential schools in Inuvik, Yellowknife, Fort Providence, Fort Smith, Fort Resolution, Fort Simpson and Hay River.

[4] Modernization theory developed as a theoretical outgrowth of the involvement of the United States government in "foreign aid" and foreign investment enterprises throughout the world. The theory posits the idea that all human societies are developing through roughly the same historical patterns as have the U.S. and northern Europe. The end of this process is thought to be "modernity", a condition conceived to be the social and economic equivalent of contemporary industrial society. Modernization theory will be discussed in some detail in Part Four.

[5] This practice has been cultivated in the women's liberation movement, in the black and red power movements, and has been supported as a useful strategy for personal liberation in a wide variety of approaches deriving from the human potential movement. For such an example, see Harvey Jackins (1983), The Reclaiming of Power, pp. 207-211.

[6] See Michael F. Kalinowski and Daniel C. Jordan (1973), "Being and Becoming: The ANISA Theory of Development", in World Order (Vol. 7, No. 4), pp. 22-24.

[7] Walter Rodney, in How Europe Underdeveloped Africa, defined economy as "winning a living from the environment". (Rodney 1972:10) A failure to win a living from the environment constitutes economic collapse, and hence complete dependency, or death.

[8] There is, however, a danger in making such alliances, for, as Franz Fanon and Paulo Freire have pointed out, it is all too easy for cultural insiders to mirror an oppressor role rather than acting as catalytic agents for genuine human transformation.

[9] This conceptualization of learning and development will be explored in depth in a discussion to follow (Part Four) on the meaning of human transformation.

[10] It is not merely a "monkey see, monkey do" imitation, however. See Polanyi (1966) for a detailed discussion of performance and human learning.

[11] See Bopp 1983.

[12] This was part of my assigned task as staff education consultant for the Dene Nation.

[13] For an articulation of neo-marxist dependency theories see Baron (1957, 1978), Bernstein (1978), Bodenheimer (1970), Carnoy (1974), Frank (1969a, 1969b).

[14] Joseph Chilton Pearce writes about individuals who were blind from birth and who, upon receiving a cornea transplant as adults, were unable to "see"; i.e. to make sense of the visual impressions stimulating the brain. ~~He~~ describes experiments with baby kittens isolated from birth and raised in a vertically striped room. The full-grown cats were unable to "see" horizontal objects. They would neatly dodge vertical chair legs, but run smack into the horizontal rungs (Pearce 1977:7).

[15] Drawn from private conversations with Phil Lane, Jr. (Lakota) and Lee Brown (B.C. Salish). Both of these men are practicing native healers.

[16] The technocratic mind set inherited from industreality fails to ask the ethical question, "Should that world be transformed?". Only the developing subjects themselves can answer that question.

Part Two: Entering the World of Another

[1] This designation came into popular usage after the Berger inquiry with the rise of a nationalist political movement uniting the five Athapascan-speaking groups residing in the Mackenzie drainage system. The famous "Dene Declaration" which gave official recognition to the term "Dene" was passed at Fort Simpson in July of 1975 by delegates representing Metis, non-status and treaty Indians of the Mackenzie valley.

[2] For a detailed review of historical and anthropological literature see Bopp 1981. Extracts are provided for the reader's convenience as Appendix A.

[3] According to the N.W.T. Data Book (1982-83), as of June, 1980 the Dogrib population was distributed as follows: Lac La Martre 235, Rae Lakes 73, Raw Edzo 1056, Snare Lake 59, Detah 160, plus a few individuals living in Yellowknife and Fort Smith. The estimated population given above is based on the knowledge that certain individuals move in and out of the community on a regular basis, and also on rising birth statistics.

[4] Fumoleau 1977:262.

[5] The text of Treaty 11 of 1921 gives the government the right to make some regulations, but the treaty parties told the Dogrib that no restrictions would ever be made. The Dene "signers" of the treaty were illiterate, and so it wasn't until the 1930s that the Dene began to realize that they had been lied to.

[6] See Fumoleau 1977:296-300.

[7] Thomas A. Crerar, Superintendent of Indian Affairs, June 7, 1944; cited in Fumoleau 1977:150.

[8] Joe Zoe Fish, July 1983. The passage and those to follow are taken from a collection of interviews with Lac La Martre elders that form the basis of a study carried on by the author between March 1983 and August 1984. Part Three will detail some of the findings of that study and its methodological implications for development educators.

[9] Mary Madeline Nitsiza, Lac La Martre, August 1983.

[10] Pierre Beaverhoe, Lac La Martre, August 1983.

[11] Anthropologist Michael Asch (1974, 1976b, 1977).

has argued that until the Dene moved into villages, there was virtually no significant change in basic social and economic patterns. I have taken issue with this point of view, arguing that the fur trade engaged the Dene in a somewhat invisible and gradual process of cultural transformation. Changes occurred as the focus of production changed from food to furs, as dependency on store-bought goods (and hence cash) increased and as the shift in distribution within bands occured from collective family ownership of the products of labor (i.e. food) to the earning of income from furs by one individual. For a thorough discussion of the gradual changes that occurred in Dene lifeways during the fur trade era, see Bopp 1981, especially pp. 37-50.

[12] Pierre Beaverhoe, Lac La Martre, August 1983, from the author's Lac La Martre "Dene Values" study.

[13] Part IV of this thesis will deal with the nature of the process in terms of its dynamics and in terms of the role of educators in promoting and assisting it to unfold.

[14] The marvelous descriptions immortalized by John G. Neihardt (1972) of the inner life of the Lakota Nation told in Black Elk Speaks was first published in 1932. These descriptions included a detailed account of the sundance, and a number of important visions received by Black Elk and given to the people in ceremonial re-creations, so that their power could heal and revitalize a wounded nation. The role of religion in the culture could only be abstracted and psychologized as Erikson has done by one who has forgotten what it is to be touched by the power of a vision, by one who does not know deeply and personally of the possibility of spiritual transformation.

[15] See Suzanne Bodenheimer's (1970) insightful article on this subject, "The Ideology of Developmentalism: American Political Paradigm-Surrogate for Latin American Studies".

[16] Walter Rodney (1972) uses the term to refer to the symbiotic relationship between a rising European industrial sector, African markets, the slave trade and plantations in the Americas. Ships carrying European trade goods travelled to African shores, unloaded and picked up slaves, carried them to American colonies, and then, loaded with raw materials from the plantations worked by those same slaves, returned to Europe where the raw materials were used in manufacturing more trade goods to sell domestically and abroad, including in Africa.

Part Three: The Lac La Martre Dene Values Project: A Case Study

[1] As will be shown in samples of interview texts to follow.

[2] These statements are composite reconstructions of numerous such statements made to me between 1983 and 1984 by various "younger" Lac La Martre people. Their names will remain anonymous because to reveal them would be to break a promised confidentiality.

[3]

> "What men or gods are these? What maidens loth?
> What mad pursuit? What struggle to escape?
> What pipes and timbrels? What wild ecstasy?...
> Bold Lover, never, never canst thou kiss,
> Though winning near the goal--yet, do not grieve;
> She cannot fade, though thou hast not thy bliss,
> For ever wilt thou love, and she be fair!"

Excerpted from "Ode on a Grecian Urn", written by John Keats in 1819, in John Keats: Selected Poetry and Letters, R.A. Fogle, ed., 1969.

[4] An interesting discussion of the issue of high- versus low-context languages appears in Edward T. Hall's (1983) The Dance of Life, Chapter 4, pp. 55-73.

[5] The research process combines the creation of knowledge by the community with learning that will assist in a change process. Research, pedagogy and mobilization are the three key elements that writers in the field of participatory research agree must be present if research is to be more than a self-serving parasitical exercise by academics whose central interest is their own reputations and credentials. For a discussion of this issue, see Bud Hall (1982), Creating Knowledge: A Monopoly? Participatory Research in Development.

[6] Michael Nitsiza, Francis Zoe and Harriet Lafferty. The latter was a Dene Nation staff member who worked at the time the interviews were conducted in the communications department as a Dogrib language translator.

[7] That is, putting [ ]s around passages which seemed to speak to particular identifiable themes that emerged from the text itself.

[8] Please note that bracketed portions of the text are my editorial inclusions inserted to facilitate clarity.

[9] The cost of this production is being underwritten

through the continued support and generosity of the Boreal Institute for Northern Studies at the University of Alberta.

[10] This, though, is unlikely, as elders would not have revealed what they did not want known.

[11] This issue was raised by Thomas Kuhn (1962) in his now classic discussion of paradigm shifts. It will be discussed in some detail in Part IV of this thesis.

Part Four: In Search of an Adequate Understanding of Human Development and the Role of Education in that Process

[1] It was Francis Bacon who provided both method and rationale for a science that produced knowledge that can be used to dominate and control nature. Nature had to be "bound into service" as our "slave" (Cited by Capra 1983: 56).

[2] See Robert Hammond (1947) The Philosophy of Al-Farabi and its Influences on Medieval Thought for an example of how Islamic civilization vitalized and set into motion the dynamic transformation of European culture.

[3] I refer here to the reincarnation of the Druid tree of life as our Christmas tree.

[4] The tarot is really a book of ancient wisdom disguised as a deck of cards.

[5] It is interesting to note that, for Marx, the movement of history was far more irresistable and necessary than it is for many of the scholars and revolutionaries following him.

[6] See Matthew 24:29.

[7] C. Furado describes three spheres of operation which crystalized into the encounter Arnold Toynbee has called, "the world and the west" (Toynbee 1952). They were: a) a new elastic labor pool, freed from agricultural work by technological innovations, combined with industrial development that could make creative use of the labor pool; b) the displacement of frontiers to still unoccupied land such as the Americas and Australia (as labor surpluses arose, colonies became extensions of the metropole, and the production system grew even more

powerfully); c) the conquest or colonization of occupied nations as in Africa, which provided manpower (sometimes in the form of slaves, markets and more raw material) (Furado 1978:33-34).

[8] Examples include the policy of the Canadian government toward our native people, especially before 1945 (See Fumoleau 1977).

[9] See Stephen Mason, 1971, A History of the Sciences, chapter 34.

[10] See A. Wallace (1974), Paradigmatic Processes in Culture Change for a theoretical model of the role of pardigm shift in culture change and a discussion of unanticipated negative side-effects.

[11] Indeed, in my attempts to constitute an integrative metaphor that somehow inscribed the process of human becoming, I arrived at the medicine wheel, that is, a circle with cross lines whirling like a wheel turning to a horizon point. Only several years later was I introduced to the medicine wheel in a way that allowed me to see the depth of the significance. As C.G. Jung has suggested, archtypal images emerge in human consciousness to express profound insights into the nature of human existence. I feel personally connected to the medicine wheel because it was, for me, my own discovery. The fact that others had also discovered and used it centuries ago is only all the more confirming to me that I have hit upon a fundamental insight into the process of human development.

[12] The sacred number four (as in the four directions) is understood by many tribes to be held in balance by the additional direction of up (to Father Sky) and down (to Mother Earth). I am not suggesting that there is anything inherently "sacred" about the number four. It represents a particular view of the universe. As Professor Harry Garfinkle (University of Alberta) suggested to me, the choice of the sacred number three, four, five, six, seven, eight, nine, thirteen, etc., may depend on a society's propensity to a certain type of abstraction. For the Cabalists of the Hebrew mystical tradition, seven was/is the most important number. The Aztec calender stressed the importance of the number thirteen. Further research is needed to determine if there is in fact a correlation between a culture's "sacred" number and the stress that culture places on abstract or rational (as opposed to intuitive) thought.

[13] I am indebted to Professor Harry Garfinkle for raising this question with me, and to Professor Kenneth

Jacnicke for assisting me to resolve the issue in my own thinking. Both of these scholars are members of the Faculty of Education at the University of Alberta, Edmonton.

[14] The Four Worlds Project will be discussed in some detail in Part Five of this thesis as an example of human development promoting education. My involvement with the project corresponds with its inception in 1982, and I continue, at this writing, to function as a core team member of the project.

[15] It is my belief that the Persian Prophet Baha'u'llah (1817-1892) is also one of these rare figures, but the tracing of His vision in the affairs of humanity is a task for future historians.

Part V: The Process of Development Education

[1] A review of the nine summary points concerning the nature of human development that appear at the end of Part Four will be helpful here.

[2] This is not to say that a third grade teacher, helping his students through a lesson on what fish do in the winter time, or helping them to learn to write in cursive script is not educating. If those activities are rooted in the process of unfolding human potential, they are assuredly educative.

[3] Note that Sanchez sees the essential interaction between human beings and the world as a "debate", a conflict, out of which man must seek to be the "conqueror of nature". This paradigm of reality is rooted in Hegelian-Marixm split from nineteenth century idealism, and especially in Marx's application of Hegel's theory of the dialectic to sociology.

[4] As stated earlier, these environments include the bio-physical, ideational, social-cultural, political, personal/psychological, spiritual, and unknown environments.

[5] See, for a clear example, Terry Carson's (1984) discussion of the Alberta government's attempts to implement the 1981 Alberta social studies curriculum.

[6] This formulation of action research was articulated by Shirley Grundy and Stephen Kemmis (1982). The work done

by the Action Research Project at Deakin University in Victoria, Australia to foster the use of an action research approach to educational problems is becoming known throughout the English-speaking world and is deserving of serious activities by education scholars.

[7] The University of Lethbridge is located in Lethbridge, Alberta, Canada.

[8] The process used to derive the Four Worlds Project principles relied more heavily on discourse and did not as systematically thematize the texts as was done in the Lac La Martre study. Nevertheless the process was very similar and the results were highly instructive for project staff and for the native communities who have had the opportunity to reflect on the principles.

[9] It was at this point that I joined the Four Worlds staff, becoming, along with my wife Judie and Phil Lane (the project co-ordinator), a member of the core managing and development team of the Four Worlds Project.

[10] A partial list includes Plains Cree, Woodland Cree, Blackfoot, Salish, Klinkit, Lakota, Dakota, Mohawk, Dene and Navaho.

[11] At This writing, the Four Worlds Project is involved in a concentrated way with seven community projects, and with another twenty communities on a process expected to lead to major projects.

[12] The report, entitled Determining our Destiny in Education is available from Evaluation Branch, Corporate Policy, Indian and Northern Affairs, Ottawa, Canada.

[13] See Daniel C. Jordan and Raymond Shepard (1972) The Philosophy of the ANISA Model and Michael F. Kalinowski and Daniel C. Jordan (1973) Being and Becoming: The ANISA Theory of Development.

[14] The Sacred Tree and the Teacher's Guide to the Sacred Tree is published by the Four Worlds Development Project, University of Lethbridge, and can be ordered by writing directly to the Four Worlds Project.

[15] Examples range from the effect of Muhammad's teachings on the tribes of Arabia to case studies in community development and non-formal education. For the latter, see Coombs (1980).

[16] Adapted from The Great Wolf and Little Mouse Sister, a video production of the Four Worlds Development

Project, University of Lethbridge. Story as told by Phil Lane, Jr.

Appendix A: Dene Lifeways

[1] Helm herself writes, "I present the discussion in terms of the Dogribs, on whom I have the most data. I have, however, drawn on material from neighbouring Arctic Drainage Athapaskan peoples to build the broad characterization which I believe to be generally applicable to the Mackenzie Drainage Athapaskan or Dene (Helm 1968:118 footnote #1).

[2] The same method was and still is used for hunting moose.

[3] These observations come out of the writer's interviews with Dene leadership at a direct descendent of these traditional gatherings; the Dene National Assembly, held at Fort Good Hope (N.W.T.) in July of 1980. They are also confirmed by the observations of earlier voyageurs and travellers to the north in the early 1800s as well as by anthropological data.

Appendix C: The First Principles

[1] If this distillation of first principles appears somewhat reductionistic, it is only because great universal concepts such as these cannot be truly understood except in their application. Authentic application itself is an interpretive process that involves interactive action and reflection by the human beings attempting to apply the principle. This dialogue must take into account the lived world of the subjects of the process, the tradition or principle itself and the unique situation in which the principle is to be applied. For a thoughtful discussion of this issue see Gadamer 1975:250-275.

Bibliography

ABDU'L-BAHA
1957. The Secret of Divine Civilization", Baha'i Publishing Trust, Wilmette, Illinois.

ACHEBE, CHINUA
1958. "Things Fall Apart", St. Paul's Press Ltd., Malta.

CANADIAN ASSOCIATION OF ADULT EDUCATORS (CAAE)
1956. "Design for Democrary", the text of the 1919 Ministers of Reconstruction Report (Britain) on adult education, Max Parrish-London, London.

AHMED, M., and COOMBS, P.
1975. "Education for Rural Development: Case Studies for Planners", Preger, New York.

ALINSKY, SAUL
1972. "Rules for Radicals", Vintage Books, New York.

ALLO, GEORGES
1963. "La Recherche de IRFED sur les Valeurs et les Civilizations" in Developpement et Civilization, March 1963, No. 13, pp. 104-108.

ANDERS and MORISSETT
1969. "Rae-Lac La Martre, An Area Economic Survey", Industrial Division, Dept. of Indian Affairs and Northern Development, Queens Printer, Ottawa, Ontario.

APPLE, MICHAEL
1979. "Ideology and Curriculum", Routeledge and Kegan Paul, London, Boston and Henby.

ARIYARATNE, A.T.
1980. "The Role of Buddhist Monks in Development", in World Development, Vol. 8, Pergamon Press, London, pp. 587-589.

ARGUELLES, JOSE A.
1975. "The Transformative Vision", Shambhala Publications Inc., Boulder, Colorado (distributed by Random House).

ASSGIOLI, ROBERTO
1965. "Psychosynthesis", Hobs, Darman & Co., New York.

ATWOOD, MARGARET
1972. "Survival", Anansi Press, Toronto.

ARNSTEIN, SHERRY
1969. "A Ladder of Citizen Participation", in *AIP Journal*, July, pp. 216-224.

ASCH, MICHAEL
1974. "Dene Self-Determination and the Study of Hunter-Gatherers in the Modern World", in L. Leacock and R. Lee, *Politics and Process in Foraging Soieties*, Cambridge University Press, Cambridge.

1976b. "Some Effects of the Late Nineteenth Century Modernization of the Fur Trade on the Economy of the Slavey Indians", in *Western Canadian Journal of Anthropology*, 6-4:7-15.

1977b. "The Dene Economy", in M. Watkins, ed., *Dene Nation: The Colony Within*, University of Toronto Press, Toronto & Buffalo.

1978. "The Economics of Self-Determination", forthcoming.

AUROBINDO, SRI
1972. "The Future Evolution of Man", compiled, summarized and notated by P.B. Saint-Hilaire and available from East-West Cultural Center, 2865 W. 9th St., Los Angeles, California 90007.

BACCHUS, M.K.
1979. "Structural Transformation as a Pre-Requisite for the Success of Non-Formal Education Programs in Economically Less Developed Countries", lead paper at the Commonwealth Specialist Conference on Non-Formal Education held in January, 1979 (author's xerox copy).

1980. "Education for Development or Underdevelopment", Wilfred Laurier University Press, Waterloo, Ontario.

BAHA'U'LLAH
1971. "Gleanings from the Writings of Baha'u'llah", Baha'i Publishing Trust, Wilmette, Illinois.

BARNETT, MICHAEL

1976. "Rural People in the Development Context: Lessons and Guidelines" in Workshop Proceedings: International Rural Development, Agricultural Economics Research Council of Canada, pp. 41-59.

BARNSCHIER, V., C. CHASE-DUNN, and R. ROBINSON
1978. "Cross-National Evidence of the Effects of Foreign Investment and Aid on Economic Growth and Inequality: A Survey of Findings and a Reanalysis", in American Journal of Sociology, Vol. 84, No. 3, pp. 651-683.

BARON, PAUL
1957. "The Political Economy of Growth", Monthly Review Press, New York.

1978. "On the Political Economy of Backwardness", in Charles Wilber (ed.) The Political Economy of Development and Underdevelopment, Random House, N.Y.

BATESON, GREGORY
1979. "Mind and Nature", Clarke, Irwin Co., Toronto.

BAUMAN, ZYGMUND
1978. "Hermeneutics and Social Science", Columbia University Press, N.Y.

BENDIX, REINHARDT
1967. "Tradition and Modernity Reconsidered", in Comparative Studies in Societies, 9:292-346.

BERGER, PETER L.
1967. "The Sacred Canopy: Elements of a Sociological Theory of Religion", Anchor Books, N.Y.

BERGER, PETER L., BRIDGETTE BERGER and HANSFRIED KELLER
1974. "The Homeless Mind: Modernization and Consciousness", Vintage Books, New York

BERGER, THOMAS
1977a. "Northern Frontier Northern Homeland", final report of the Mackenzie Valley Pipeline Inquiry, Vol. 1, Minister of Supply and Services, Ottawa.

1977b. "Northern Frontier Northern Homeland", final report of the Mackenzie Valley Pipeline Inquiry, Vol. 2, Minister of Supply and Services, Ottawa.

BERNSTEIN, BASIL B.
1970. "Social Class, Language and Socialization", in Current Trends in Linquistics, Vol 12, p. 1546.

BERNSTEIN, HENRY

1970. "Modernization Theory and the Sociological Study of Development", in Journal of Development Studies, Vol. 7, No. 2, pp. 141-160.

1978. (ed.) "Underdevelopment and Development: The Third World Today", Penguin Books, New York.

BHATTACHARYGA, S.N.

1968. "Community Development: An Analysis of the Program in India", Academic Publisher, Calcutta.

BODENHIEMER, SUSANNE J.

1970. "The Ideology of Developmentalism: American Political Paradigm-Surrogate for Latin American Studies", in Berkley Journal of Sociology, Vol. XV, pp. 95-137.

BOPP, MICHAEL

1981. "The Dene Development Question", University of Alberta M.A. Thesis, Division of Community Development.

BOTKIN, JAMES, MAHADI ELMANDJRA and MIRCEA MALITIZA

1979. "No Limits to Learning: Bridging the Human Gap", a report to the Club of Rome, Pergamon Press, Toronto and New York.

BOULDING, KENNETH

1956. "The Image", University of Michigan Press, Ann Arbor, Michigan.

CABRAL, AMILCAR

1973. "Return to the Source: Selected Speeches of Amilcar Cabral", N.Y. Monthly Review Press, African Information Service.

CALLOWAY, HELEN (ed.)

1980. "Participation in Research: Case-Studies in Participatory Research in Adult Education", Netherlands Center for Research and Development in Adult Education, Postbus 351, 3800 AJ Amersfoort, 3821000, Netherlands.

CAMPBELL, JOSEPH

1956. "Hero with a Thousand Faces", Meredian Books, New York.

1968. "Masks of God: Creative Mythology" (four volumes), Viking Press, New York

CAPRA, FRITJOF

1955. "The Tao of Physics", The Chaucer Press Ltd., Bingay, Suffolk.

1983. "The Turning Point", Bantam Books, Toronto.

CARNOY, MARTIN
1974. "Education as Cultural Imperialism", Longman, New York.

CARSON, TERRANCE R.
1984. "A Hermeneutic Investigation of the Meaning of Curriculum Implementation for Consultants and Teachers", University of Alberta Ph.D. thesis.

CASTENEDA, CARLOS
1972. "Journey to Ixlan", Simon and Schuster, New York.

CHRISTAIN, JANE and PETER GARDNER
1977. "The Individual in Northern Dene Thought and Communication: A Study in Sharing and Diversity", National Museum of Man, Mercury Series, Canadian Ethnology Service Paper No. 35, National Museum of Canada, Ottawa.

COLCLOUGH, C.
1976. "Basic Education: Samson or Delilah", in Convergence, Vol. 6, No. 2.

COLLIER, JOHN
1967. "Visual Anthropology: Photography as a Research Method", Holt, Rinehart and Winston, New York.

1973. "Alaskan Eskimo Education: A Film Analysis of Cultural Confrontation in the Schools", Holt, Rinehart and Winston, New York.

CONCHELOS, GREG
1980. "History, Professionalism, Community Learning, and the Control of Skill", In Learning, Fall/Winter 1979/80, pp. 10-12.

COOMBS, PHILIP H
1968. "The World Educational Crisis", Oxford University Press, New York and Toronto.

1980. (ed.) "Meeting the Basic Needs of the Rural Poor: The Integrated Community-Based Approach", Pergamon Press, Inc., N.Y.

COOMBS, PHILIP and MANZOOR AHMED

1974. "Attacking Rural Poverty", John Hopkins University Press, Baltimore.

CURLE, ADAM
1973. "Educational Problems of Developing Societies", Praeger, New York.

DASMAN, RAYMOND F.
1972. "Planet in Peril", Penguin Books, UNESCO, Harmondsworth, Middlesex, England.

DASMAN, RAYMOND, JOHN P. MILTON and PETER H. FREEMAN
1974. "Ecological Principles for Economic Development", John Wiley & Sons Ltd., Toronto.

DE CASTRO, JOSUE
1952. "The Geography of Hunger", Little, Brown & Co., Boston.

DELORIA, VINE JR.
1973. "God is Red", Dell Publishing, New York.

DENE NATION
1976. "The Dene: Land and Unity for the Native People of the Mackenzie Valley", Dene Nation, Yellowknife, N.W.T., Canada.

1979. "Recognition of the Dene Nation through Dene Government", Dene Nation, Yellowknife, N.W.T., Canada.

DEPRES, LEO A.
1967. "Cultural Pluralism and Nationalist Politics in British Guiana, Rand McNally Co., Chicago.

DE SANTOS, T.
1978. "The Crisis of Development Theory and the Problem of Dependency in Latin America", in Bernstein (ed.) Underdevelopment and Development: The Third World Today, Penguin Books, N.Y., pp. 57-80.

DEVINE, MARINE (ed.)
1983. "NWT Data Book 1982-83", Outcrop, Yellowknife.

DEWEY, JOHN
1934. "A Common Faith", Yale University Press, New Haven.

DIVALE, WILLIAM T.
1972. "Systematic Population Control in the Middle

Upper Palaeolithic: Inferences Based on Contemporary Hunter-Gatherers", in World Archaeology, 4:222-243.

1976. "Population, Warfare, and the Male Supremacist Complex", in American Anthropologist, 78:521-538.

DOBZHANSKY, THEODOSIUS
1962. "Mankind Evolving", Yale University Press, New Haven.

DUBEY, VINOD (coordinating author)
1975. "Yugoslavia: Development with Decentralization", published for the World Bank by the John Hopkins University Press, Baltimore and London.

DUNN, E.S. JR.
1971. "Economic and Social Development: A Process of Social Learning", John Hopkins Press, Baltimore, Maryland.

EHRLICH, PAUL R.
1968. "The Population Bomb", Ballantine Books, New York.

EISENSTADT, S.N.
1974. "Studies of 'Modernization and Sociological Theory' in History and Theory", in Studies in Philosophy of History, Vol. XIII(3).

ELLUL, JACQUE
1967. "The Technological Society", Alfred A. Knopf, New York.

ERIKSON, ERIK
1963. "Childhood and Society", Norton, N.Y.

FANON, FRANZ
1963(1978). "The Wretched of the Earth", Grover Press, New York.

FARADAY, A.
1972. "Dream Power", Berkley Press, New York.

FERGUSON, MARILYN
1980. "The Aquarian Conspiracy", J.P. Tarcher Inc., Los Angeles, California.

FOGLE, R. H. (ed.)
1969. "John Keats Selected Poetry and Letters", Holt, Rinehart and Winston, New York.

FOUR WORLDS DEVELOPMENT PROJECT
1984. "The Sacred Tree" and "The Sacred Tree Teacher's Guide", produced collaboratively by Judie Bopp, Michael Bopp, Lee Brown, and Phil Lane, The University of Lethbridge Press, Lethbridge, Alberta.

FRANK, ANDRE-GUNDER
1969a. "Capitalism and Underdevelopment in Latin America", Monthly Review Press, New York.

1969b. "Sociology of Development and Undervelopment of Sociology", in Latin America: Underdevelopment or Revolution, Monthly Review Press, New York.

FRANKL, VICTOR
1969. "Man's Search for Meaning", Beacon Press, Boston.

FREIRE, PAULO
1970. "The Pedagogy of the Oppressed", Seabury Press, New York.

1978. "Pedagogy in Process: The Letters to Guinea-Bissau", Seabury Press, New York.

FREUD, SIGMUND
1950. "The Interpretation of Dreams", Modern Library, New York.

FROMM, ERICH
1961. "Marx's Concept of Man", Frederick Ungar Pub. Co., New York.

1968. "The Revolution of Hope: Toward a Humanized Technology", Bantam Books, New York.

1981. "To Have or to Be?", Bantam Books, New York.

FULLER, BUCKMINSTER
1970. "Operating Manual for Spaceship Earth", Simon and Schuster, New York.

FUMOLEAU, RENE, O.M.I.
1977. "As Long as this Land Shall Last", McClelland & Stewart, Toronto.

FURADO, C.
1978. "Elements of Theory of Underdevelopment: The Underdeveloped Structure", in Bernstein (ed.) Underdevelopment and Development: The Third World Today, Penguin Books, New York, pp. 33-43.

GADAMER, HANS-GEORG
1975. "Truth and Method", Seabury Press, New York.

1981(1976). "Reason in the Age of Science", The MIT Press, Cambrige, Mass. & London, England.

GALTUNG, JOHN
1978. "Toward Self-Reliance and Global Interdependence", joint project on environment and development #3, a report prepared for the policy board of CIDA and the Advanced Concepts Center, Environment Canada, Government of Canada, Ottawa.

GILLESPIE, BERYL C.
1971. "Ethnographic Field Notes; Fort Norman and Fort Franklin", (files of the author), Anthropology Dept., University of Iowa, Iowa City, cited by Helm 1980.

GOBINEAU, COUNT
1853 (1966). "Inequality of the Human Races", translated by Adrian Collins, Noontide Press, Los Angeles.

GOULET, DENIS
1971. "An Ethical Model for the Study of Values", in Harvard Educational Review, May 1971, Vol. 41.

1977. "The Cruel Choice", Athenium, New York.

1980. "Development Experts: One-Eyed Giants" in World Development, Vol 8, Pergamon, Oxford.

GRANDSTAFF, M.
1973. "Are Formal Schools the Best Place to Educate?" in C. S. Brembeck and J.J. Thompson, New Strategies for Educational Development: A Cross-Cultural Search for Non-Formal Alternatives, Lexington Books, New York.

1974a. "Systematic Capacity as a Problem in the Design of Alternatives to Formal Education", in Non-Formal Education as an Alternative to Schooling, Discussion paper No. 4, Programme of Studies in Non-Formal Education, Michigan State University.

GRIFFIN, KEITH
1969. "Underdevelopment in History", in the author's Underdevelopment in Spanish America, George Allen & Unwin, London.

GROOME, THOMAS

1980. "Christian Religious Education", Harper & Row, N.Y.

GRUNDY, SHIRLEY and STEPHEN KEMMIS
1982. "Educational Action Research in Australia: the State of the Art (An Overview)", in The Action Research Reader, ccompiled by the Action Research in Curriculum Team, Stephen Kemmis, Chairman, Deakin University Press, Victoria, Australia.

GURLEY, JOHN W.
1978. "Maoist Economic Development: The New Man in China", in Wilber 1978:334.

HABERMAS, JURGEN
1971. "Knowledge and Human Interest", Beacon Press, Boston.

1975. "Legitimation Crisis", Beacon Press, Boston.

HALL, BUD
1975. "Creating Knowledge: Breaking the Monopoly, Research Methods, Participation and Development", Working Paper No. 1 of the Participatory Research Project of the International Council for Adult Education, Toronto.

HALL, BUD; AURTHER GILLETTE and RAJISH TANDON (eds.)
1982. "Creating Knowledge: A Monopoly? Participatory Research in Development", Participatory Research Network Publication, Toronto, Ontario.

HALL, EDWARD T.
1983. "The Dance of Life", Anchor Press Doubleday, Garden City, New York.

HAMMOND, ROBERT
1947. "The Philosophy of Al-Farabi and its Influence on Medieval Thought", Hudson Press, New York.

HAGUE, MEHTA, RAHMAN and WIGNARAJA
1977a. "Rural Development Strategy", in Development Dialogue, 1977, Vol. 2, Dag Hammarskjold Foundation, Uppsala.

1977b. "Development Reconsidered", in Development Dialogue, 1977, Vol. 2, Dag Hammarskjold Foundation, Uppsala.

HARDISTY, WILLIAM L.
1867. "The Loucheaux Indians", Annual Report of the Board of Regents of the Smithsonian Institution,

Washington, DC, pp. 311-320, cited by Helmm 1980.

HARRISON, J. F. C.
1961. "Learning and Living 1790-1960", University of Toronto Press, Toronto.

HEARNE, SAMUEL
1958. "Journey from Prince of Wales Fort on Hudson Bay to the Northern Ocean 1769, 1770, 1771, 1772", Richard Glover, ed., Macmillan, Toronto.

HELM, JUNE (MACNIESH)
1956. "Leadership among the Northern Athabascans", Anthropologica 2, Ottawa, 1956, pp. 131-163.

1961. "The Lynx Point People: The Dynamics of a Northern Athapascan Band", National Museum ofCanada, Bulletin 176, Ottawa.

1968. "The Nature of Dogrib Socio-Territorial Groups", in R. Lee and I. DeVore, eds., Man the Hunter, Aldine Publishing Company, Chicago.

1972. "The Dogrib Indians", in M. G. Bicchieri, ed., Hunters and Gatherers Today, Holt, Rinehart and Winston, New York. (Passages cited in this thesis taken from Helm's own mimeographed version distributed before publication.)

HELM, JUNE
1980. "Female Infanticide, European Diseases, and Population Levels among the Mackenzie Dene", in American Ethnologist, Vol. 7, No. 2, May, 1980.

HELM, JUNE; TERRY ALLIBAND and TERRY BIRK
1975. "The Contact History of the Subarctic Athapaskans: An Overview", In A. McFayden Clark, ed., Proceedings: Northern Athapaskans Conference, 1971, National Museum of Canada, Ottawa

HELM, JUNE and NANCY LURIE
1961. "The Subsistence Economy of the Dogrib Indians of Lac La Martre in the Mackenzie District of the Northwest Territories", Northern Coordination and Research Center, Department of Northern Affairs and Natural Resources, Ottawa.

HELM, JUNE; EDWARD S. ROGERS; and J. G. E. SMITH
Forthcoming. "Intercultural Relations and Cultural Change in the Subarctic Shield and Mackenzie Lowlands", in Handbook of N. American Indians, Vol. VI: The Subarctic. (From a draft copy distributed

by Helm)

HELY, A. S. M.
1962. "New Trends in Adult Education", UNESCO, New York.

HIEDEGGER, MARTIN
1977. "Basic Writings" (David Farrell Krell, ed.), Harper and Row, New York.

HIELBRONNER, ROBERT
1980. "Marxism For and Against", W.W. Norton & Co., New York.

HILL, CHRISTOPHER and EDMUND DELL
1969. "The Good Old Cause: The English Revolution of 1640-1660 Extracts from Contemporary Sources", Augustus M. Kelly Publishers, London.

HIXON, LEX
1978. "Coming Home: The Experience of Enlightenment in Sacred Traditions", Anchor Press Doubleday, Garden City, New York.

HOBART, C.W.
1965. "Eskimo Education in Residental Schools in the Mackenzie District", volume 1 of 2, unpublished, bound by the Boreal Institute, University of Alberta.

HONIGMANN, JOHN J.
1946. "Ethnography and Acculturation of the Fort Nelson Slave", in Yale University Publications in Anthropology, No. 33, Yale University Press, New Haven.

1949. "Culture and Ethos of Koska Society", in Yale Publications in Anthropology, No. 40, Yale University Press, New Haven.

1954. "The Kasha Indians: An Ethnographic Reconstruction", in Yale University Publications in Anthropology, No. 51, Yale University Press, New Haven.

1969. "Success in School: Adaptation in a new Canadian Arctic Town", unpublished paper bound by the Boreal Institute, University of Alberta.

HOSELITZ, BERT F.
"Social Structure and Economic Growth", in Economic Internagionale, Vol. 6, No. 3, August 1953.

1964. "Social Stratification and Economic Development", in International Social Science Journal, Vol. 16, No. 2.

HOYDEN, BRIAN
1972. "Population Control among Hunters/Gatherers", in World Archaeology 4:205-221.

HUNT, DEBORAH
1981. "Education and Social Change: A Photographic Study of Peru", Kendall/Hunt Publishing Co., 2460 Kerper Boulevard, Dubuque, Iowa 52001.

HUNTER, G.
1966. "Manpower, Employment and Education in the Rural Economy of Tanzania", African Reserch Monographs, No. 9, Paris: UNESCO/IIEP.

HUSSERL, EDMUND
"Ideas: General Introduction to Pure Phenomenology", translated by W.R.B.. Gibson, Collier Books, New York.

1970a. "Logical Investigations" (2 volumes), translated by N. Findlay, Routeledge and K. Paul, London.

1970b. "The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy", translated by David Carr, Northwestern University Press, Evanston, Ill.

1973. "Cartesian Meditations: An Introduction to Phenomenology", translated by Dorian Cairns, M. Nijhoff, The Hague.

1977. "Phenomenological Psychology", translated by John Scanlon, M. Nijhoff, The Hague.

HUXLEY, ALDOUS
1945. "The Perennial Philosophy", Harper Brothers, New York.

ILLICH, IVAN
1968. "The Futility of Schooling in Latin America", Saturday Review, April 20, 1968.

JACKINS, HARVEY
1983. "The Reclaiming of Power", Rational Island Publishers, Seattle.

JACKSON, PHILIP
1968. "Life in Classrooms", Holt, Rinehart &

Winston, Inc., New York.

JACKSON, TED
1977. "Dene Learning for Self-Determination and the Mackenzie Valley Pipeline Inquiry (1974-1977)", author's xerox copy of a paper presented to the Workshop on Collaborative Program Development, Center for International Education, University of Massachusetts, Amherst, Mass.

JAMBREK, PETER
1975. "Development and Social Change in Yugoslavia", Saxon House/Lexington Books, Westmend, Farnbourough, Wants, England and Lexington, Mass., U.S.A.

JAMES, WILLIAM
1910. "The Varieties of Religious Experience: A Study in Human Nature", Longmans, Green and Co., New York.

JANTSCH, ERICH
1980. "The Self-Organizing Universe", Pergamon, N.Y.

JOLLY, RICHARD
1974. "The Judo Trick", in Education and Development Reconsidered, The Bellagto Conference Papers, ed. by Champion Ward, Praeger, N.Y.

JOLLY, RICHARD et al
1973. "Third World Employment: Problems and Strategy Selected Readings", Penguin Books, Harmondsworth, Middlesex, England.

JONES, ROBERT
1976. "Culture Contact in the 19th Century Mackenzie Basin, Canada", in Current Anthropology, 172:344f.

JORDAN DANIEL C. and RAYMOND SHEPARD
1972. "The Philosophy of the ANISA Model", in World Order, Vol. 7, No. 1, Fall, 1972.

JUNG, CARL G.
1964. "Man and His Symbols", Doubleday & Co. Inc., Garden City, N.Y.

KAHN, HERMAN and ANTHONY WIENER
1967. "The Year 2000", Collier-MacMillan Ltd., London.

KALINOWSKI, MICHAEL F. and DANIEL JORDAN
1973. "Being and Becoming: The ANISA Theory of Development", in World Order, Vol. 7, No. 4, Summer, 1973.

KELLOUGH, GAIL
1980. "From Colonialism to Imperialism: The Experience of the Canadian Indians", in John Harp; and John R. Hafley, Structured Inequality in Canada, Prentice Hall, Scarbourough.

KELLY, THOMAS
"1962(1970). "A History of Adult Education in Great Britain (Middle Ages to 20th Century)", Liverpool University Press.

KERMMIS, STEPHEN
1982. "Action Research in Retrospect and Prospect", in The Action Research Reader, Deakin University Press, Victoria, Australia.

KENDREW, W. G. and B. W. CURRIE
1955. "The Climate of Canada", The Queens Printer, Ottawa.

KINSER B. and N. KLEINMAN
1969. "The Dream that was No More a Dream: A Search for Aesthetic Reality in Germany 1890 - 1945", Harper Colophan, New York.

KNOWLES, MALCOLM S.
1977. "The Adult Education Movement in the U.S.", Robert E. Krieger Publishing, Huntington, N.Y.

KOHLBERG, C.
1969. "Stages of Moral Development", in Learning: The Magazine for Creative Teaching, December 1972.

KRISTOL, IRVING
1978. "Two Cheers for Capitalism",Basic Books Inc., N.Y.

KUHN, THOMAS S.
1962. "The Structure of Scientific Revolutions", University of Chicago Press.

LA BELL, T. J.
1972. "Education and Development: Latin America and the Caribbean",The Latin American Center, U.C.L.A., Los Angeles.

LA MARCHANT, RENE
1970. "Rwanda and Burundi", Praeger Publisher, New York.

LASZLO, ERVIN
1972a. "Introduction to Systems Theory", Harper Torch Books, New York.

1972b. "The Systems View of the World", Braziller, N.Y.

LEACH, EDMUND
1968. "A Runaway World?", The Ruth Lectures 1967, Oxford University Press, Oxford.

LEE, RICHARD
"Kung Bushman Subsistence: An Input Output Analysis", in Environment and Cultural Behavior, edited by A. Vayda, Natural History Press, Garden City, New York.

LEINER, M.
1975. "Cuba: Combining Schooling with Practical Experience", in Coombs and Ahmed 1975.

LERNER, DANIEL
1958. "The Passing of Traditional Society: Modernizing the Middle East", The Free Press, Glencoe.

LEWIN, KURT
1946. "Action Research and Minority Problems", in Journal of Social Issues, Vol. 2, pp. 34-46.

1947. "Feedback Problems of Social Diagnosis and Action", in Human Relations, Vol. 1, pp. 147-153.

1952. "Group Decisions and Social Chage", in T.M. Newcam and E.E. Hartley (eds.), Readings in Social Psychology, Holt, New York.

LEWIS, ARTHUR
1958. "Unlimited Labor: Further Notes", Manchester School of Economics and Social Studies.

LEWIS, OSCAR
1971. "The Cutlure of Poverty", in Poverty in Canada, edited by John Harp and John R. Haffery, Prentic & Hall, N.Y.

LEWIS, W.A.
1958. "Economic Development", Manchester School of Economics and Social Studies, Manchester, England.

LEYS, COLIN
1975. "Underdevelopment in Kenya: The Political Economy of Neo-Colonialism 1961 - 1971", Heinemann, London.

LILLY, JOHN
1972. "The Center of the Cyclone", The Julian Press, New York.

LOREE, DONALD J.
1974. "Power and Marginality in Yellowknife and Fort Rae of the Northwest Territories", Ph.D. Thesis, Department of Sociology, University of Alberta.

LORENZ, KONRAD
1967. "On Aggression", Harcourt, Brace and World, New York.

LOVEJOY, A. O.
1936. "The Great Chain of Being", Harper and Brothers, New York.

LOWE, JOHN
1975. "The Education of Adults: A World Perspective", UNESCO Press, OISE, Toronto.

LUCKMANN, THOMAS
1967. "The Invisible Religion", MacMillan, New York.

MACDONNELL, JOHN
ca1800. Among the Masson Papers, McGill University, Montreal, from excerpts in typescript, National Museum of Canada, all references cited by June Helm in "Leadership Among the Northern Athapascans", 1956.

MACY, JOANNA
1983. "Dharma and Development: Religion and Resource in the Sarvodaya Self-Help Movement", Kumarian Press, West Hartford, Connecticut.

MARKLEY, O. M. and Willis W. HARMAN
1982. "Changing Images of Man", Pergaman Press, New York.

MARTIN, P. W.
1955. "Experiment in Depth", Routledge and Kegan Paul, London.

MARX, KARL

1844(1972). "Economic and Philosophical Manuscripts", in Robert C. Tucker, ed., The Marx Engels Reader, New York.

1888. "Thesis on Feuerback", in Robert C. Tucker, ed., The Marx Engels Reader, New York.

1891. "Capital", in Rober C. Tucker, ed., The Marx Engels Reader, New York.

MASLOW, ABRAHAM
1968. "Toward a Psychology of Being", Van Nostrand, Princeton, New Jersey.

MASON, J. ALDEN
1946. "Notes on the Indians of the Great Slave Lake Area", in Anthropology, No. 34, Yale University Press, New Haven.

MASON, L. R.
1889. "Les Bourgeois de la Companie du Nord-Ouest", Vol. 1 de l'imprimerie generale a Cote et Cie, Quebec.

1890. "Les Bourgeois de la Companie du Nord-Ouest", Vol. 2 de l'imprimerie generale a Cote et Cie, Quebec.

MASON, STEPHEN F.
1971. "A History of the Sciences", Collier Books, New York.

MATSON, FLOYD W.
1976. "The Idea of Man", Delcourte Press, New York.

MCCLELLAND, DAVID
1961. "The Achieving Society", D. Van Nostrand Company, Inc., Princeton, New Jersey.

MCCULLUM, HUGH
1977. "No Last Frontier", World Council of Churches, New York.

MCLEOD, JACK
1982. "An American Odyssey", in Quest, March 1982, pp. 31-48.

MCLUHAN, MARSHAL and QUENTIN FIORE
1968. "War and Peace in the Global Village", McGraw and Hill, New York.

MEADOWS, MEADOWS, RANDERS and BEHRENS

1972. "The Limits to Growth", Universe Books, New York.

MEDAWAR, P. B.
1959. "The Future of Man", New American Library, New York.

MEMMI, A.
1965. "The Colonizer and the Colonized", Beacon Press, Boston.

MERLEAU-PONTY, MAURICE
1968. "The Visible and the Invisible", Northwestern University Press, Evanston.

1973. "Consciousness and the Acquisition of Language", Northwestern University Press, Evanston.

MIDGLEY, MACY
1979. "Beast and Man: The Roots of Human Nature", Harvester Press Ltd., 16 Ship Street, Brighton BN1 1AD, England.

MORROW, WILLIAM (JUDGE)
1973. "Reasons for Judgement of the Honorable Mr. Justice W. G. Morrow", In the Matter of an Application by Chief Francois Paulette et al. to lodge a certain caveat with the Registor of the Land Titles Office for the Northwest Territories, Supreme Court of the Northwest Territories, Yellowknife, Northwest Territories, Canada.

MOSHER, A. T.
1958, "Varieties of Extension Education and Community Development", Extension Publication, No. 12, N.Y. State College of Agriculture, Cornell University.

NASH, PAUL
1968. "Models of Man: Explorations in the Western Educational Tradition", John Wiley and Sons Inc., N.Y.

NELSON, RICHARD K.
1973. "Hunters of the Northern Forest", University of Chicago Press, Chicago.

NGUGI, JAMES
1965. "The River Between", Heinemann Educational Books Ltd., London.

NIEBUHR, REINHOLD
1964. "The Nature and Destiny of Man: Volume One

Human Nature", Charles Schribner & Son, N.Y.

NORTHWEST TERRITORIES DEPARTMENT OF EDUCATION, CURRICULUM DIVISION
1972. "Elementary Education in the Northwest Territories", Government of the Northwest Territories, Yellowknife.

NORTHWEST TERRITORIES DEPARTMENT OF EDUCATION, PROGRAMME DIVISION
1973. "Education in the Middle Years", Government of the Northwest Territories, Yellowknife.

NOVAK, MICHAEL
1978. "Ascent of the Mountain Flight of the Dove: An Invitation to Religious Studies", Harper and Row, New York.

NUR COMBE, BARRY
1976. "Children of the Dispossessed", East-West Center, University Press of Hawaii.

NYRERE, JULIUS
1968. "Education for Self-Reliance", reprinted in Tanzania: Revolution by Education, Idrian N. Resnick, Ed., Longmans of Tanzania.

1976. "The Declaration of Dar-es-Salaam", reprinted in Adult Learning: A Design for Action, edited by Bud L. Hall and J. Robie Kidd, Pergaman Press, Oxford, New York, Toronto.

OGBU, J.
1978. "Minority Education and Caste", Academic Press, Harcourt Brace Javanovich, New York.

OUSPENSKY, P. D.
1971. "A New Model of the Universe", Vintage Books, Random House, New York.

PARSON, TALCOTT
1951. "Social System", The Free Press, Glencoe.

PATANJALI
1953. "How to Know God: The Yoga Aphorisms of Pontanjali", Harper, N.Y.

PEARCE, JOSEPH CHILTON
1971. "The Crack in the Cosmic Egg", Julian Press, New York.

1980. "Magical Child", Bantam Books, New York.

PERLS, FRITZ S.
1969. "Gestalt Therapy Verbatim", Real People Press, Lafayete, California.

PETITOT, EMILE
1891. "Autour du Grand Lac des Esclaves", Albert Savine, editeur, Nouvelle Librarie Parisienne, Paris.

PETROVIC, GAJO
1965. "Praxis und Sein", in *Praxis: Revue Philosphique Edition Internationale*, Vol. I, No.1, pp. 26-40.

PIAGET, JEAN
1968. "Origins of Intelligence in Children", International University Press, New York.

1971. "The Construction of Reality in the Child", Ballantine Books, New York.

POLAK, FREDERIK
1973. "The Image of the Future", Elsevier Scientific Publishing Company, Amsterdam, London, and New York.

POLANYI, KARL
1963. "The Great Transformation", Beacon Press, Boston.

POLANYI, MICHAEL
1966. "The Tacit Dimension", Doubleday & Company, Inc., Garden City, New York.

POLDINE, CARLO
1978. "Nulato: An Indian Life on the Yukon", Carlo Poldine, 211, Southern Street, Fairbanks, Al. 99701, cited by Helm 1980.

POLGAR, STEVEN
1972a. "Population History and Population Policies from an Anthropological Perspective", in *Current Anthropology*, *13*:203-211.

PRIGOGINE, ILLYA
1980. "From Being to Becoming", W. H. Freeman Co., New York.

PRIGOGINE, ILLYA; PETER ALLAN and ROBERT HERMAN
1977. "Long-term Trends and the Evolution of Complexity", in *Goals in Global Community*, Ervin Laszlo and Judah Bierman, eds., Pergamon, New York.

PRIGOGINE, ILLYA and ISABELL STENGERS
1984. "Order out of Chaos: Man's New Dialogue with Nature", Bantam Books, Toronto and New York.

RADHAKRISHNAN, S.
1974. "Mysticism and Ethics in Hindu Thought", in The Spirit of Modern India, edited by Robert A. McDermott and V. S. Naravane; Thomas Y.Crouell Co., N.Y.

RAGBAD, IBRAHIM A.
1980. "Islam and Development", in World Development, Vol. 8, Pergaman Press Ltd, London.

RAM DAS, BABA
1971. "Be Here Now", illustrated edition, San Cristabel,New Mexico.

RANDERS, JORGEN and DANELLA H. MEADOWS
1972. "The Carrying Capacity of our Global Environment: A Look at the Ethical Alternatives", in Western Man and Environmental Ethics, Ian Barbour, ed., Addison-Wesley Publishers, Reading Mass.

RICHARDSON, SIR JOHN
1851. "Arctic Searching Expedition: A Journal of a Boat-Voyage through Rupert's Land and the Arctic Sea in Search of the Discovery Ships under Command of Sir John Franklin", 2 volumes, Longman, Brown, Green, and Longmans, London.

ROBERTS, HAYDEN
1979. "Community Development: Learning and Action", University of Toronto Press.

RODNEY, WALTER
1972. "How Europe Underdeveloped Africa", Bogle-L'Ouverture Publications, London.

ROGERS, EVERETT M. and F. FLOYD SHOEMAKER
1971. "Communication of Innovations: A Cross-Cultural Approach", The Free Press, Collier MacMillan Publishers, London.

ROSS, HEIDI
1981. "Understanding Pedagogy: The Witness, the Storytellers, and the Teacher", in Paulo Friere in Ann Arbor Vol II Ed Suranski et al. Dept. of Adult and Continuing Education, University of Michigan, Ann Arbor.

ROSS, JAMES

1981. "Dene Language Study", Dene Nation, Yellowknife.

ROSTOW, W. W.
1962. "The Stages of Economic Growth: A Non-Communist Manifesto", Cambridge University Press, Cambridge.

ROYCE, JAMES
1964. "The Encapsulated Man", D. Van Nostrand Co. Inc., Princeton, New Jersey.

SAHLINS, MARSHALL
1972. "Stone Age Economics", Aldine Publishing Co., New York.

SALK, J.
1972. "Man Unfolding", Harper and Row, New York.

1973. "The Survival of the Wisest", Harper and Row, New York.

SANDERS, DOUGLAS E.
1977. "The Formation of the World Council of Indigenous Peoples", published by the International Work Group for Indigenous Affairs, Copenhagen.

SAPIR, EDWARD
1970. "Culture, Language and Personality: Selected Essays", edited by David G. Mandelbaum, University of California Press, Berkeley.

SARTRE, JEAN PAUL
1967. "Existentialism", reprinted in Sprague and Taylor, eds., Knowledge and Value, (second edition), Harcourt, Brace and World Inc., N.Y.

SATIN, MARK
1978. "New Age Politics", Whitecap Books, West Vancouver, B.C.

SCHAEFER, UDO
1983. "The Imperishable Dominion: The Baha'i Faith and the Future of Mankind", George Ronald, Oxford.

SCHRENK, MARTIN; CYRUS ARDALAN and NAWAL AL EL TATAWY
1979. "Yugoslavia: Self-Management Socialism and the Challenges of Development", the John Hopkins University Press, Baltimore and London.

SCHUMACHER, E. F.
1974. "Small is Beautiful", Abacus, London.

SCHUTZ, ALFRED
1970. "On Phenomenology and Social Relations", University of Chicago Press, Chicago and London.

1971. "Collected Papers" (Vol I, II and III), edited by A. Broderson, Martinu and Nijoff, The Hague.

SCHUTZ, ALFRED and THOMAS LUCKMANN
1973. "The Structures of the Life-World", Northwest University Press, Evanstan.

SCOLLEN, RON and SUZANNE SCOLLON
1979. "Literacy as Focused Interaction", forthcoming in the Quarterly Newletter of the Laboratory of Comparative Human Cognition, Alaskan Native Language Center, Fairbanks.

SEARS, DUDLEY
1977. "The New Meaning of Development", in International Development Review, 1977/3.

SIMKINS, TIM
1977. "Non Formal Education and Development", Manchester Monograph #8, World Education, New York.

SIRC, LJUBO
1979. "The Yugoslavian Economy Under Self-Management", MacMillan Press Ltd., London.

SKINNER, B. F.
1948. "Walden Two", The MacMillan Co., New York.

1955. "Freedom and the Control of Men", in The American Scholar, Vol. 25, No. 1, Winter 1955-56.

1971. "Beyond Freedom and Dignity", Bantam Books, Toronto.

SMITH, DAVID
1976. "Cultural and Ecological Change: The Chipewayan of Fort Resolution", in Arctic Anthropology, 13-1:35-42.

SMITH, JAMES G. E.
1976. "Local Band Organization of the Caribou-eater Chipewayan", in Arctic Anthropology, 13-1:12-24.

SMUTS, JAN CHRISTIAN
1961. "Holism and Evolution", Viking Press, New York.

SOROKIN, P. A.
1957. "The Crisis of Our Age", E. P. Dulton, Co., New York.

1962. "Social and Cultural Dynamics", 4 volumes, Bedminster Press, London.

1964. "The Basic Trends of Our Times", College and University Press, New Haven, Conneticut.

SOUTHWICK, CHARLES
1972. "Ecology and the Quality of our Environment", Van Nostrand Rienhold Co, New York.

SPICER, EDWARD H. (ed.)
1952. "Human Problems in Technological Change", Russel Sage Foundation, New York.

STILES, J. MARK
1979. "The Baker Lake Affair", forthcoming in Popular Analysis, Popular Action: Canadian Readings in Adult Learning for Political Change, edited by Ted Jackson and Bud Hall, I.C.A.E., Toronto.

STOTT, DAVID
1975. "Improvement and Reform: A Comparative Study of the Village Level Change Agent in China and India", and M.A. thesis for the Division of Community Development, University of Alberta.

STREETS, DONALD T. and DANIEL C. JORDAN
1973. "Guiding the Process of Becoming: The ANISA Theories of Curriculum and Teaching", in World Order, Summer 1973, Wilmette, Illinois.

SUNKEL, OSVALDO
1977. "The Development of Development Thinking", in I.D.S. Bulletin, March, 1977, Vol. 8.8(3).

SURANSKY, VALERIE
1981. "Paulo Freire: A Pedagogy of Praxis", in Paulo Freire in Ann Arbor, edited by Valerie Suransky, Ann Wood and Michael Day, Dept. of Adult and Continuing Education, University of Michigan, Ann Arbor.

SWANTZ, MARGE LIISA
1977. "Participatory Research: An Educational Approach to Development Studies", University of Dar es Salaam, Dar es Salaam, Tanzania.

TART, C. T.

1970. "Transpersonal Potentialities of Deep Hynopsis", in Journal of Transpersonal Psychology, Vol. 2, No. 1.

1972. "States of Consciousness and State-Specific Sciences", in Science, Vol. 176, pp. 1203-1210.

TAYLOR, CARL C.
1955. Untitled paper for the Community Development Seminar of the International Co-operation Administration (I.C.A.), June 21-22, 1955, cited by A.T. Mosher in Varieties of Extension Education and Community Development, Community Extension Publication #2, Yew York State College of Agriculture, Cornell University, 1958.

TOFFLER, ALVIN
1980. "The Third Wave", William Morrow & Co., N.Y.

TOYNBEE, ARNOLD
1953. "The World and the West", Oxford University Press.

TURNBULL, COLIN M.
1972. "The Mountain People", Touchstone Series, Simon and Schuster, N.Y.

TURNER, FREDERICK JACKSON
1893. "The Frontier in American History", an essay.

VASQUEZ, ADOLFO SANCHEZ
1977(1966). "The Philosophy of Praxis", Merlin Press, London or Humanities Press, New Jersey.

VON BERTALANFFY, L.
1967. "Robots, Men and Minds", Braziller, N.Y.

1971. "System, Symbol and the Image of Man", chapter 4 in The Interface between Psychiatry and Anthropology, I. Gladstone (ed.), Brunner-Magel, New York.

VONNEGUT, KURT
1973. "Breakfast of Champions", Delacorte Press, New York.

WALLACE, A. F. C.
1972. "Paradigmatic Processes in Cultural Change", in American Anthropologists, Vol. 74, No. 3, pp. 467-478.

WARD, BARBARA

1965. "The Lopsided World", W. W. Norton & Co.

1980. "Where there is no vision, the people perish", in International Development Review, 1980/4.

WATKINS, MEL (ed.)
1977. "Dene Nation: The Colony Within", University of Toronto Press, Toronto and Buffalo.

WEISS, P.
1969(1972). "The Living System", in Beyond Reductionism, A. Koestler and J. R. Snytheies (eds.), Radius Books, Hutchinson, London.

WEISSKOPF, V. F.
1971. "Physics in the Twentieth Century: Selected Essays", MIT Press, Cambridge, Mass.

WERNER, OSWALD ET AL
1970. "Some New Developments in Ethnosemantics", in Current Trends in Linguistics, Vol. 12, pp. 1477-1543.

WHITE,LYNN JR.
1967. "The Historic Roots of our Ecological Crises", in Science, Vol. 155, pp. 1203-1207.

WHITEHEAD, ALFRED NORTH
1979. "Process and Reality", corrected edition, The Free Press, Collier MacMillan Co., London.

WILBER, CHARLES K. (ed.)
1978. "The Political Economy of Development and Underdevelopment", second edition, Random House, New York.

WILBER, CHARLES K. and KENNETH P. JAMESON
1980. "Religious Values and Social Limits to Development", in World Development, Vol. 8, Pergamon Press, London, pp. 467-479.

WILBER, CHARLES K. and JAMES H. WEAVER
1979. "Patterns of Dependency: Income Distribution and the History of Underdevelopment", in The Political Economy of Development and Underdevelopment, second edition, Random House, New York.

WILSON E. O.
1975. "Sociobiology", Harvard University Press, Cambridge, Mass.

WINTROB, RONALD M. and PETER S. SINDELL
1968. "Education and Identity Conflict among Cree Youth", ARDA Project No. 34002, McGill Cree Project, Department of Forestry and Rural Development, McGill University, Montreal.

YEATS, WILLIAM BUTLER
1962. "Selected Poems and Two Plays of William Butler Yeats", M. L. Rosenthal, ed., MacMillan Publishing Co., New York.